



# Primer on Strategies, Practices & Research *Education & Sustainability Education in Teacher Education*

## **New Accord on Education for a Sustainable Future**

We are living in an era of climate crisis, and all levels of education must work to enact a sustainable, equitable and just future. The United Nations' Sustainable Development Goals (SDGs) represent urgent targets for all countries to work towards to ensure sustainable peace and prosperity for people and the planet. With the release of the ACDE's [Accord on Education for a Sustainable Future](#), Canadian faculties of education are directed to put UNESCO's (2015) call to re-orientate teacher education to address climate change, and put sustainability into action. In recent decades, Canadian scholars, researchers and teacher educators have called for a greater emphasis on Environmental and Sustainability Education (ESE) and Education for Sustainable Development (ESD) in preparing new teachers, substantiated by research conducted by the UNESCO, the Council of Ministers of Education, Canada, and the Sustainability & Education Policy Network. Recent research is demonstrating that rapid progress in this critical work is possible when faculties of education make it a priority.

The ACDE's [Accord on Education for a Sustainable Future](#) directs faculties of education to help meet Canada's commitment to the SDGs by integrating ESE and climate change education into preservice and inservice teacher education programs. By implementing this in parallel with its [Accord on Indigenous Education](#), students in faculties of education will benefit from a synergy that centres equity and justice for all living beings at the heart of every level of education.

The ACDE has established a new priority for teacher education across Canada with the launch of its new Accord, and we are ready to help with its implementation. As a national network dedicated to [Environmental and Sustainability Education in Teacher Education](#) (ESE-TE), we can help faculties of education deepen ESE and climate change education in their programs through research, sharing of pedagogical initiatives and collaboration. What follows is a primer with a few starting points to initiate discussion in your faculty of education; for more information, and access to research and resources, visit the [ESE-TE](#) website.

WEB: [www.eseinfacultiesofed.ca](http://www.eseinfacultiesofed.ca) EMAIL: [contact@eseinfacultiesofed.ca](mailto:contact@eseinfacultiesofed.ca)

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## Strategies for ESE in Teacher Education

Teacher educators in faculties of education and community organizations across the country have been exploring a variety of pathways for embedding Environmental & Sustainability Education (ESE) into preservice and inservice teacher education. Here are some strategies that they have used:

- **INTEGRATE** ESE into existing Teacher Education Programs by infusing it into existing courses (e.g. place-based math trails, nature-based story-telling, citizen science, or environmental art education) or creating new core or elective courses in ESE (view [sample syllabi](#) here).
- **CONNECT** ESE to existing institutional priorities, such as Indigenous Education (through Land-based learning, relationality, and the Seven Grandfather Teachings), Equity and Anti-racist Education (through [Ecojustice Education](#), environmental and climate justice) and the UN's Sustainable Development Goals.
- **DEVELOP** co-curricular learning in ESE for preservice and inservice teachers, including lectures, webinars and weekend workshops that can be recognized in an ESE certificate or Co-curricular record designation. Work with NGOs like EcoSchools Canada, Learning for a Sustainable Future, Natural Curiosity or the Clean Foundation to support co-curricular learning.
- **OFFER** practica experiences that model ESE for preservice teachers by locating placements in certified EcoSchools, [UNESCO Associated Schools](#), [Établissements verts Brundtland](#), [Sustainable Future Schools](#), outdoor education centres or community organizations dedicated to ESE.
- **ADVOCATE** for pedagogical shifts that model experiential, inquiry-based and transformative learning by using the local community as classroom and promotes education's activist role in addressing 'wicked' societal problems.
- **PROPAGATE** ESE research by hiring faculty with expertise in ESE and climate change education, by dedicating resources and funding, by partnering on studies with school boards and NGOs, and by mobilizing knowledge in ESE.
- **EMBED** ESE across a faculty of education by facilitating professional development for instructors and researchers, hiring faculty with ESE expertise and experience, and making sustainability a priority in built infrastructure.
- **GROW** local, national and international partnerships centred on ESE by collaborating with other faculties of education, school boards, NGOs, Ministry of Education and policy organizations dedicated to shifting towards sustainability and taking climate action. Establish new networks, build capacity collaboratively, and apply for funding together

## Speaker's Service

Need support to more deeply embed ESE into your faculty of education? We can connect you with knowledgeable teacher educators, faculty members and researchers who can offer talks, webinars or workshops to support faculty of education development in ESE. Reach out to ask more about this service: [contact@eseinfacultiesofed.ca](mailto:contact@eseinfacultiesofed.ca)

## Promising Practices in ESE in Teacher Education

Canadian faculties of education are already developing ways to bring ESE and Climate Change Education into preservice and inservice teacher education. While not a definitive list, here are links to share some of these promising practices:

- [E-course in ESE](#) for student teachers across Canada, offered by the ESE-TE national network
- [Indigenous Ed & Environmental and Sustainability Education](#) core preservice course at Trent University
- [Outdoor & Experiential Education](#) preservice cohort at Queen's University
- educational gardens run for and by students at [UBC](#), [Trent](#) and [OISE](#)
- [Environmental Education program](#) at Simon Fraser University
- [Global Education cohort](#) at the University of Ottawa
- [Education for Sustainability Master's cohort](#) at UBC
- [Professional Learning Partnership](#) between OISE and the Toronto District School Board
- [Outdoor Experiential Education](#) course for inservice teachers at Lakehead University
- [Master's Program in Sustainability, Creativity & Innovation](#) at Cape Breton University
- [Master's Program in Critical Environmental Education](#) at the University of Saskatchewan
- [Videos](#) of promising practices in ESE Canadian preservice programs

## Research in ESE in Teacher Education

[ESE in Teacher Education National Network](#)

[Sustainability & Education Policy Network](#)

[Centre de recherche en éducation et formation relatives à l'environnement et à l'écocitoyenneté](#), UQÀM

[Environmental and sustainability education: Canadian perspectives](#). (2019). Karrow, D., & DiGiuseppe, M. (Eds.) Springer Nature AG.

[International Perspectives on the Theory and Practice of Environmental Education](#) (2018). Reis & J. Scott (Eds.) Springer.

[Canadian Perspectives on Initial Teacher Environmental Education Praxis](#). (2016). Karrow, D. DiGiuseppe, M., Elliott, P., Inwood, H. & Gwekwerere, Y. (Eds.) Canadian Association of Teacher Education.

[Special Issue: Environmental and Sustainability Education in Teacher Education](#). *Canadian Journal of Environmental Education*, 23(1), 2020. Karrow, D., Inwood, H., & Sims, L. (Eds.)

[Deepening Environmental Education in Pre-Service Education Resource](#) (2014). Inwood, H, & Jagger, S. OISE, University of Toronto.

[International Handbook for Research on Environmental Education](#). (2014). Brody, M., Dillon, J., Stevenson, R. B. & Wals, A. (Eds). American Educational Research Association/Lawrence Erlbaum.

[Education for sustainable development in Canadian faculties of education](#). (2012). Council of Ministers of Education, Canada.

[Guidelines and recommendations for reorienting teacher education to address sustainability](#) (2005). Hopkins, C., & McKeown, R. Education for Sustainable Development in Action technical paper no. 2. UNESCO.

[Environmental and Sustainability Education in Canadian Faculties of Education](#). (2021) Research Report. Kool, R., Karrow, D. & DiGiuseppe, M. ESE in Teacher Education National Network.

[Canada, Climate Change and Education: Opportunities for Formal and Informal Education](#). (2019). Field, E. Research Report. Learning for a Sustainable Future.