

ACCELERATE / ACCÉLÉRER

CLIMATE CHANGE EDUCATION
IN CANADIAN TEACHER EDUCATION

L'ÉDUCATION AUX CHANGEMENTS
CLIMATIQUES DANS LA FORMATION
DES ENSEIGNEMENTS AU CANADA



PROFESSIONAL LEARNING CASE STUDY

Climate Camp for Teachers 2024



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Context

Since its inception in October 2017, the Toronto District School Board (TDSB) EcoSchools Program has collaborated with the Ontario Institute for Studies in Education (OISE) at the University of Toronto to offer a variety of professional learning opportunities for TDSB inservice teachers and OISE preservice teachers to help enact the educational components of the TDSB's Climate Action Report and OISE's Sustainability & Climate Action Plan. Over the past six years, K-12 teachers, staff and administrators have participated in integrated (inservice & preservice) professional learning experiences on a wide range of topics, from environmental racism and climate justice, to nature-based and outdoor learning, to youth-led climate action. These learning experiences have been offered in many different formats, including workshops, webinars, conferences, EcoFairs, and special events. The TDSB & OISE also lead a Climate Literacy & Leadership Program and an ongoing professional learning community (PLC) for K-12 teachers that supports Action Research in

Environmental & Sustainability Education (ESE) in TDSB classrooms. This diverse set of programs, ranging from those that are readily accessible and entry-level (light green), to ones that require a deeper level of experience and commitment (deeper green), aim to cultivate promising practices and teacher leadership in ESE and more recently in Climate Change Education (CCE) across the school board (refer to Table 1).

Table 1: Professional Learning Program offered by the TDSB & OISE 2023-26.

Professional Learning Activities in CCE	Frequency
Conference & EcoFair	One each fall (day-long)
Workshops & Webinars	Six per year (September - May)
EcoSchools Celebration	One in late spring
Principal/VP Climate Action Meetings	Two per year
Climate Camp	One each summer (3.5 days)
Climate Literacy & Leadership Program	Four days each year
Action Research Team	Three days each year

Program Foundations



The most recent addition to these professional learning opportunities is Climate Camp, which was designed in the winter of 2024 and delivered for the first time in August 2024. Organized by the TDSB’s *Sustainability Office* and *Urban Indigenous Education Centre* (UIEC) in collaboration with members of OISE’s *Sustainability and Climate Action Network*, this Camp offered K-12 teachers and OISE graduate students three days of rich collaborative inquiry focused on CCE at the TDSB’s *Mono Cliffs Outdoor Education Centre* in Caledon, ON. A variety of keynotes, workshops, indoor and outdoor activities

offered opportunities for experiential and holistic learning to help educators prepare for teaching that centred equity, inclusion, justice and reconciliation as key tenets of CCE. This filled a gap in the TDSB/OISE collaboration to develop and strengthen relationships amongst educators in the school board and OISE graduate students who are dedicated to CCE, and who wanted to develop their expertise in it through an immersive, intensive summer learning experience. By supporting the learning of these educational ‘champions’, the board aimed to develop teacher capacity and leadership

in CCE to impact their students' learning and their influence in school communities in positive ways.

The design and implementation of Climate Camp drew on a variety of diverse theoretical frameworks:

- **Indigenous Ways of Knowing and Being:** Centring Indigenous voices in CCE was a principal tenet on which the Camp was built. We drew inspiration from the writings and teachings of a diverse set of Indigenous scholars related to Land-based learning (such as Leanne Betasamosake Simpson, Robin Wall Kimmerer, Sandra Styre, Eve Tuck and Glen Coulthard), as well as those focused on Indigenous climate justice (including Eriel Deranger, Autumn Peltier, and Clayton Thomas-Muller for example.) Critical policies, such as the UNDRIP and TRC Report & Calls to Action, were presented and discussed. As a valuable member of the planning team, Torie Gervais (Wolastoq First Nation) from the TDSB's UIEC was pivotal in ensuring that Indigenous ways of knowing and being were authentically included in the Camp; her knowledge as an experienced teacher and Land-based educator was key, as was her role in liaising with the UIEC team to incorporate their feedback on the Camp's design.
- **Climate Justice Education:** While the TDSB has utilized the commonly used term 'CCE' for this and other programs, we aimed to introduce teachers to climate justice education at the Camp, recognizing that this is still relatively new in K-12 education circles. We have been inspired by the foundational writings of Robert Bullard, Julian Agyeman, and C.A. Bowers, amongst others, and more recently by the work of American scholars like Rebecca Martusewicz, Jeff Edmundson, John Lupinacci, Farhana Sultana and Christina Kwauk, as well as Canadian experts such as Naomi Klein, Ingrid Waldron, Fikile Nxumalo and Maria Vamvalis. Centring the marginalized voices of people and more-than-human beings who are most impacted by environmental inequities and climate injustice is critical in informing a climate justice approach, as is recognizing the root causes of the climate crisis in our political, cultural and educational systems. Envisioning a new future that emphasizes relationality and reciprocity to ensure that all forms of life on the Earth have access to health and well-being was introduced early in the Camp, and formed the basis for its culminating presentations by the teachers.
- **Transformative Approaches to CCE:** The planning team brought a commitment to, and engagement with, transformative approaches to CCE pedagogy; this was critical to ensure we are not replicating the very teaching methods that have led to the climate crisis in the first place. We were inspired by the early work in this field by scholars who connected transformative approaches to environmental learning (such as David Orr, Joanna Macy, and Edmund O'Sullivan), and experts like Arjen Wals, Heather Burns, and Julie Singleton who have been advocating for integrating transformative pedagogy into ESE more recently. Transformative pedagogy offers holistic strategies for learners to synthesize cognitive, affective and embodied forms of learning, integrating the 'head, heart and hands and spirit' into CCE. It combines this with transdisciplinary, Land-centred, and place-based education, providing opportunities for learning that is relational, community-engaged and action-oriented. The design of the Camp aimed to

highlight transformative pedagogical approaches both in theory and practice, modelling this in multiple ways, such as through experiential workshops in arts-based education, nature-based learning and educational gardening.

Curriculum & Implementation



Mono Cliffs Outdoor Education Centre provided a generative setting of natural and purpose-built spaces that encouraged those in attendance to deepen their knowledge about CCE, embrace justice-centred climate action, and nurture their resilience for leading this work. Diverse perspectives, innovative approaches and compelling ideas were introduced as the inservice and preservice teachers interacted with CCE experts, Indigenous knowledge-keepers, youth activists,

leaders from the TDSB EcoSchools, UIEC teams, and OISE's teacher education program, and most importantly, with each other. Meals, breaks, and evening social activities provided time for nourishment, self-care, reflection and nurturing relationships to energize and empower them for leading CCE in the subsequent year. Participants were invited to share their expertise and work collaboratively to reflect on and refine their practice in CCE for the coming school year. What follows provides a snapshot of the logistics of the Camp:

Program Leadership

- Camp Coordinators & Curriculum Leads: Dr. Hilary Inwood & Maria Vamvalis
- Keynote Speaker & Talk: Dr. Dan Longboat (Trent University)
- Indigenous Facilitators: Torie Gervais (UIEC) & Kasennyohstah Lauren Williams
- Workshop Presenters: Maria Vamvalis, Pam Miller, Torie Gervais (UIEC), Kasennyohstah Lauren Williams, Sylvia Denton-Carryl, Laurie LaBrecque, Chris Metropolis, Chloe Tse, Linda Naccarato
- Mono Cliffs OEC Host/Outdoor Educator: Karen Lomath
- Support Team: Linda Naccarato, Sarah Urquhart, Monica Fennema

Participants

- 33 TDSB Teachers: 23 primary/junior teachers & 10 secondary teachers
- 3 TDSB Administrators: 1 principal & 2 vice-principals
- 18 OISE Graduate Students/Preservice Teachers
- 6 Organizing Team Members

- 8 Workshop Facilitators

Key Themes

- Developing comfort in accessing, discussing, processing and working creatively with complex climate emotions
- Meaningfully integrating distinct indigenous worldviews, knowledge systems, and approaches in this work
- Centring healing, justice and restoration
- The importance of Land-based and place-based learning
- The necessity of holistic and critical orientations to CCE, fostering holistic intellectual growth across disciplines to develop collective capacities to shape new systems (nurturing habits of mind)
- The benefits of intergenerational approaches to learning
- building bridges with community, collaboratively managing and responding to authentic problems
- Nurturing resilience for conflict, complexity and controversy while being grounded in powerful visions and values
- Embracing action and activism as ways of living in the face of climate change



Program Overview

Day 1:

- Welcome
- Introductions & Icebreakers
- Haudenosaunee Thanksgiving Address
- Climate Change Trivia and Games

Day 2:

- Welcome; Nature-based Learning Activities (optional)
- Keynote Talk - *Climate Change Resilience: An Indigenous Perspective* (Dr. Dan Longboat)
- Afternoon Talk - *Climate Emotions as Messengers for New Ways of Living* (Maria Vamvalis & Kasenniyostah Lauren Williams)
- Workshops -
 - *Truth & Reconciliation in CCE* (Torie Gervais; Kasenniyostah Lauren Williams; Pam Miller; Maria Vamvalis)
 - *Re-imagining the Future* (Hilary Inwood & Pam Miller)

- Choose your own learning Adventure (teacher-led workshops, hikes and rest options)
- Music & Poetry Night around the Campfire

Day 3:

- Nature-based Learning Activities (optional)
- Talk 1- Holistic Climate Literacy & Habits of Mind (Maria Vamvalis)
- Talk 2 - Youth Action & Voices in CCE (Maria Vamvalis)
- Workshops on Holistic Climate Literacy:
 - *Land as First Teacher* (Kahsenniyohstha Lauren Williams)
 - *Nurturing Systems-Thinking* (Pam Miller)
 - *Race, Nature and the Outdoors* (Sylvia Denton-Carryl)
 - *Radical Imagination: Creative Approaches to CCE* (Hilary Inwood)
- Workshops on Empowering Action, Agency & Activism:
 - *Land as First Teacher* (Kahsenniyohstha Lauren Williams)
 - *Embodying Climate Change through Games* (Pam Miller, Jenn Vetter, Chris Metropolis)
 - *Gardening as Climate Action* (Laurie Labrecque & Laura Thompson)
 - *Learning from Youth Activism & Agency* (Chloe Tse & Maria Vamvalis)
- Creating CCE Stories (cohort creating time)
- Choose your own learning Adventure (teacher-led workshop, hikes and rest)
- Dance around the Campfire

Day 4:

- Nature-based Learning Activities (optional)
- Re-Storying Education/Sharing Cohort CCE Stories: The culminating group projects were co-created by each cohort group and centred on sharing the educators' vision for CCE in their classrooms through creative forms of storytelling. They integrated their learnings and creatively shared these by practicing transformative pedagogical strategies and expressing their ideas through dramatic, poetic and musical means; there were skits, spoken word poems, as well as learnings about CCE through art, song and dance.
- Deepening Climate Commitments



Camp Logistics

- **Promotion:** This began in late March 2024, allowing time for educators to plan their summer vacations around the Camp. It was advertised through the

TDSB's EcoSchools newsletter, as well as to OISE graduate students through their Sustainability & Climate Action ListServ.

- **Registration:** Teachers and OISE students applied to attend Climate Camp via a Google survey form. As there were more teachers who applied than there were spaces, we balanced those accepted by grade level and ESE experience. Teachers were asked to register with a \$200 deposit (\$100 was rebated after completing the Camp.) The \$100 cost paid by teachers included 3 days of professional learning, as well as accommodations and all meals. OISE obtained a grant for their students to attend the Camp fully subsidized.
- **Communications:** Once registered, all registrants and program leaders received regular updates and reminders in the early summer and again the week before the Camp began. A Google site was created to share info on schedules, speakers & workshop leaders, and CCE resources.

Feedback from Participants

For this first iteration of Climate Camp, feedback from participants was collected in two ways: anecdotally over four days (Monday through Thursday), and through a feedback survey sent a few days after the Camp's end. Written and verbal feedback from the participants was shared by the Camp's organizing team in a debrief the week after the Camp. Twenty-eight participants completed the survey (a strong 66% response rate), the highlights of which follow:

- **Logistics** - 80% of respondents strongly agreed that the registration process was clear, and that the location, food and accommodations met their learning needs. Participants were appreciative of the availability of vegetarian/vegan food at every meal, as well as the accommodations (two people to a room). Small suggestions were made to improve their experiences for next summer, such as organizing a bus to bring participants to Camp (rather than the ridesharing organized this year.)
- **Quality of Learning** - 75% of respondents rated the overall quality of their professional learning experiences at the Camp as 'very high' (5/5) and another 17% rated it as 'high' (4/5). This certainly suggests that the Camp met their expectations and needs for professional learning in CCE, and aligned with what the organizing team heard anecdotally; feedback was very positive throughout the Camp, with appreciation expressed for the efforts made in planning and delivering this experience. Many asked if they could return to Camp the next summer.
- **Capacity-building in CCE**
 - 100% of respondents agreed or strongly agreed that their knowledge of climate issues improved, as did their understanding of Indigenous Education. Anecdotal evidence supported this; discussion about the concepts shared by the Indigenous speakers turned up repeatedly throughout the Camp.

- o 92% of respondents agreed or strongly agreed that they improved their understanding about teaching strategies related to CCE and the types of climate action that can be taken with students. This was evident in the culminating CCE Stories, where teachers referenced and modelled the pedagogical strategies they learned about at the Camp.

Comments from Participants:

- *The camp was GREAT! And I have been sharing my experiences from that week with my friends, family and co-workers. I am looking forward to joining the group again next year!*
- *It was a fabulous four days. I thoroughly enjoyed meeting like-minded educators, learning various ways to teach climate change, engaging in climate conversations, and going on the hikes and campfire parties. The facilitators and Camp staff were friendly, knowledgeable, and accommodating. Thank you for the wonderful opportunity to learn in the Camp.*
- *Overall I enjoyed all my workshops. I think they had a good variety of learning, reflection, and action, and I appreciated how the land was used in all of the workshops I attended.*
- *The reading materials and resources provided will be invaluable in deepening my knowledge and understanding of CCE.*
- *THANK YOU so much to everyone involved in creating an amazing, energizing, and inspiring learning experience. It was very clear that all aspects and elements had been thought through and it made for a great learning experience.*

Lessons Learned

As the first 'summer camp' professional learning experience led by the TDSB and OISE collaboratively, the organizing team was very satisfied with the results of this first delivery. Participants were very happy with their learning experience; the focus on building community was met as many new relationships were established and existing ones strengthened. The logistics flowed smoothly thanks to an experienced set of team members; having different people oversee administrative and programmatic duties was a successful strategy, as was having regular planning meetings to share updates with other team members. Creating a Google site for team members and the participants proved to be an excellent way to share information in advance of the Camp and update regularly as changes arose (though not as well during the Camp as the wifi was not always reliable.)

One of the most important lessons learned was to plan for even more outdoor learning to be embedded into the structure of the workshops next year. While we aimed for a balance of indoor and outdoor learning, we heard clearly that participants would like to be outside even more, despite the cool temperatures at this year's Camp. (Had it rained, this feedback might have been different).

Another lesson, counter to our expectations, was to offer fewer workshop choices for participants. Some expressed disappointment in not being able to attend all of the workshops, so fewer offerings would decrease their feelings of missing out on important learning opportunities. Along the same lines, some participants asked for more rest time to support informal and outdoor learning; while we'll experiment with this, getting the balance right for all may prove to be tricky due to a wide range of expectations for summer professional learning.

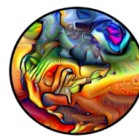
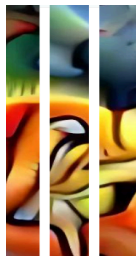
Finally, given the request by many of the participants to be involved in next year's Camp, we will consider how to meet this request knowing the limits on the physical capacity for people (to stay overnight and be fed in the dining hall) on site. It may prove possible for the Camp 'alumni' to join in a workshop day to continue their learning, and to share what they have been leading in CCE since attending the Camp.

Next Steps

The TDSB and OISE will co-lead Climate Camp over three summers (2024, 2025 & 2026). Planning is already underway for the 2025 Climate Camp based on feedback and our experience last summer. We anticipate some changes to the curriculum, but the overall logistics and structure of the Camp is likely to stay the same given its positive reception in its first year. We are planning a research study to more fully investigate the experience of participants and the impacts of the Camp on their classroom practice in the coming year.

More Information

Please email oise.scan@utoronto.ca



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