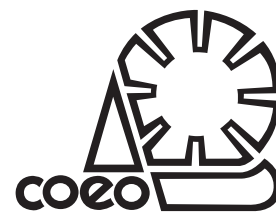


Pathways

THE ONTARIO JOURNAL OF OUTDOOR EDUCATION
Summer 2022, 34(4)



Pathways

COEO

Formed in 1972, the Council of Outdoor Educators of Ontario (COEO) is a non-profit, volunteer-based organization that promotes safe, quality outdoor education experiences for people of all ages. We achieve this by publishing the *Pathways* journal, running an annual conference and regional workshops, maintaining a website, and working with kindred organizations as well as government agencies. Members of COEO receive a subscription to *Pathways*, as well as admittance to workshops, courses and conferences. A membership application form is included on the inside back cover of this issue of *Pathways*.

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Pathways

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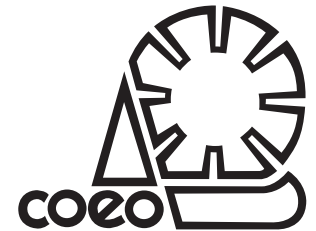
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Features

<i>A Dream, A Reality, and An Accountability</i>	6
Tashya Orasi	
<i>"All Our Relations"</i>	7
Holly Groome	
<i>Disenchantment to Re-Enchantment: Navigating Climate Change Through Place and Land Relationships</i>	9
Neal Jankowski	
<i>A Cycle of a Year</i>	13
Alicia Colavito	
<i>Year of Climate Action Research Project - 1492 Land Back Lane</i> . . .	14
Doris Espinoza	
<i>The Summer of Fire</i>	19
Julia Mills	
<i>Dear Older Generations</i>	20
Maddy Lamers	
<i>Susceptibility - Accountability - Dichotomy</i>	21
Emma Stam	
<i>How to Weigh a Plane in the Modern Day</i>	23
Hannah Winger	
<i>Forty-Nine-Point-Six-Degrees-Celsius</i>	25
Brandon Earl MacLeod	
<i>There is No Vaccine for Climate Change: The Need for Financial Activism</i>	27
Jill Bressmer	
<i>Lovers, Dreamers, and Drums – A Protest Song</i>	29
Cole Griffin Davison	
<i>An Aspiring Teacher's Climate Manifesto</i>	31
Hudaibia Naseem	
<i>Snow Sculptures</i>	33
Paul Berger	
<i>Keeping the Earth Warm: Life Giving vs Life Threatening</i>	34
Courtney Strutt	

Columns

Editor's Log	2
Ellen Field, Devon Lee, Sara Layton, Olivia Hunt, Craig Barclay and Paul Berger	
President's View	5
Karen O'Krafka	
A Final Note	35
Ellen Field, Devon Lee, Sara Layton, Olivia Hunt, Craig Barclay and Paul Berger	
The Gathering	36

We would like to acknowledge that Indigenous people have led the fight to protect Land, water and climate, and they continue to do so. If climate policy was able to look seven generations ahead, instead of barely half-a-generation, we would not likely be in a climate crisis.

However, science demands urgent climate action if we are to avoid the worst of human-caused climate change. Climate action is not the work of one teacher, one principal, or one office; it is an all-hands-on-deck situation. In November, 2020, Lakehead University committed to divesting its endowment of fossil fuel stocks, the sixth Canadian university to do so. Building on this accomplishment and recognizing the need for further bold steps to tackle climate change, Lakehead declared the 2021/2022 school year the Year of Climate Action (YOCA). YOCA was a university-wide invitation, a call-to-action, and an opportunity for faculty, staff, administration, students, and our larger community to collectively join together to listen, learn, share, and most importantly act on climate change. Critically, YOCA was framed from the lens that change is possible when we work together.

In conjunction with Lakehead's Year of Climate Action, we are taking this opportunity to reflect on student learning and engagement with climate change in our Faculty of Education. We have curated this Special Issue of COEO to share student writing, multi-modal media art, and poetry about the climate crisis as both a call-to-action and pedagogical inquiry on how we, collectively, as educators, can turn to what profoundly matters in these moments of rapid change and uncertainty.

As environmental educators and outdoor educators ourselves, our pedagogies have been greatly impacted by the COVID-19 pandemic and, at last count, two years of primarily remote, virtual education. YOCA took place amidst this unique learning environment that has, in many

respects, limited the sort of collective, experiential, outdoor education that we aim to foster through our courses. With that in mind, we are including some in-person examples to showcase a more robust pedagogical approach to climate education and one that we hope will soon be possible again. We recognize that climate change will continue to deepen crises both environmental and social, and that as educators we must be prepared for these pedagogical pivots.

We have been responding to current developments in the field ever since the first climate change education elective was taught in the Bachelor of Education in 2014 and as a special topics course in the Masters in Education in 2016—never teaching our courses the same way twice. The emergent nature of climate science and discourse means our understanding of climate change, its urgency, ways to communicate effectively about it, and ways to tackle the crisis, is constantly evolving and our pedagogy must keep pace. Each iteration of the course requires substantial revisions, which make them a considerable amount of work to teach but incredibly rewarding and, we believe, impactful (Field et al., 2022). Climate change education courses have continued every year in both the BEd and MED programs here at Lakehead University, and continue to grow with more than one section offered at both levels presently.

Collectively, our teaching goals for climate change education courses can be distilled down to three main learning outcomes. We want our students to (1) gain knowledge and understanding of climate challenges, (2) establish a sense of urgency and understanding of possible climate actions, and (3) develop a sense of agency in their ability to take action on climate change. We posit that climate change is the defining issue of our time and work to advance our students' capacities as engaging and effective climate change educators. Our courses inquire into how educators can engage with climate change as an

environmental, economic, philosophical, political, ethical, and social justice issue by bringing together theory and practice. We use framing questions such as: *How bad is climate change? What responsibility do educators have to engage with climate change? How do we balance teaching about the negative impacts of climate change with the opportunities that responding to climate change presents? How can educators teach about issues of politics, science, and ethics in our classrooms? And what role can educators play in shaping a living future?*

We strive for inclusive, transformational classrooms where students can be vulnerable and courageous, and where they are empowered and inspired to become agents of change. The student submissions in this special edition are reflective of the creative and compelling contributions our students are making to climate change education and activism. We hope that they will inspire you to bring climate change into (and out of) the classroom, as they have for us. Within this special issue, student contributions are organized into several themes which explore climate change education and pedagogy.

Connections to Place and Land: Flourishing and Survival

This theme is grounded in our connections to place and Land including the non-human inhabitants of these areas. Indigenous epistemologies and stewardship, as peoples who have lived in harmony with Land since time immemorial, provide direction for how we must reframe our relationship to our surroundings. (Re)connecting to a favourite local place and focusing our attention to how a place is already and will be impacted by climate change helps to ground the complexity of climate change with lived experience. This can move students' understanding of climate change from abstract, geographically or temporally distant, or monolithic, to concrete, geographically, and temporally present as well as specific and localized.

A deeper awareness of how climate change affects the places around us gives rise to opportunities for taking action that stem from personal and affective dimensions. The submissions for this theme occur in different places and highlight reflections on the intimate relationships between people and Land, ways of knowing and doing, and flourishing and surviving in the midst of the climate crisis. The texts are both meditations of topophilia as well as inquiries into truthful accountability asking the reader to consider relational knowledge of Land, Indigenous communities, and possibilities for a future where our human systems are responsive to the boundaries of natural systems.

Urgency and Processing Complex Emotions

As we learn more about climate change, our understanding of the urgent need for action sets in. The urgency of the climate crisis continues to mount as the latest IPCC report (2022) shows that greenhouse gas emissions need to peak by 2025 in order to stave off the worst impacts of climate breakdown. In effect, humanity is at a "now or never" moment. Even half a degree will significantly worsen the risks of drought, floods, extreme heat and poverty for millions of people. The staggering impact of humans on the natural systems which we and all other living entities rely on is threatening our lives. This is an existential dilemma and an extraordinary force for us to face as individuals. Learning about the urgency of climate change impacts and the need for climate action is almost always coupled with complex climate emotions such as fear, despair, grief, anger, and many others. We have complex emotions because we are both thinking and feeling beings. Moreover, these sorts of reactions to the existential reality of climate change are appropriate and normal. As educators, we need to have awareness about the social and emotional dimensions of how our climate teaching

affects learners and build in opportunities to honour and process these emotions. We have found that creative assignments offer outlets for students to express these emotions in ways that feel authentic and safe. This process can be important for moving past the denial, distraction, or paralysis that students may feel about the climate crisis and help them move towards taking action. The pieces selected for this theme are snapshots of our students' sense of urgency and offer windows into the accompanying complex climate emotions and the importance of action. The pieces were submitted as parts of courses and authors were approached about their inclusion or students from across the Faculty responded to an open-call for submissions.

Agency and Activism

Climate change compels us to foster a sense of agency and activism in our students. Action must be taken urgently in order to combat the climate crisis now upon us. The submissions for this section range from financial activism to arguably the most potent form of activism today—youth activism. Our students are uniquely positioned as members of the youth movement through their involvement in Fridays for Future school strikes and global divestment campaigns, but also as leaders and educators of emerging youth activists. Their varied activities and influences are documented in this section capturing a spirit of agency and activism toward tackling the climate crisis head-on.

Climate Change Education

The final theme of this special edition is climate change education. Climate science is in a state of constant evolution, and our pedagogy must keep pace. If anything, we have learned that the crisis is more significant and accelerated than once predicted. As environmental educators, we are lifelong learners ourselves. The climate crisis demands it. It is imperative for our students to continue learning and following shifts and turns in science,

policy, and social change, and to develop a love of learning in their students who will be profoundly impacted by climate change. We aim to communicate best practices, insofar as they exist today, to promote education that is responsive to uncertainty, looks past despair into action, and is developmentally appropriate. Learners of all ages must be engaged in climate stewardship and this makes its way in and out of classrooms in unique ways impacted by age and place. Our students teach diverse subjects and age ranges, but the common factor is that they all understand the importance of education to the climate movement. Here you will find examples of how climate change is being integrated across the curriculum.

References

- Field, E., Berger, P., Lee, D., Strutt, C., Vella, C. (March 8, 2022). Student Reflections on Climate Change Education Courses at Lakehead [Conference presentation]. *Research and Innovation Week, Lakehead University*. <https://www.lakeheadu.ca/research-and-innovation/week>
- IPCC, 2022: *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926

Ellen Field, Devon Lee, Sara Layton, Olivia Hunt, Craig Barclay and Paul Berger
Editors

On the cusp of summer solstice we are dreaming and planning towards the fall and to our very special 50th anniversary conference! 50 years! As an organization, the COEO has a great many things to celebrate as well as significant growth ahead. And as we come together to reflect and look back upon all of the significant work we have done, we will also make time to plan forward, and imagine all of the possibilities that the future may hold. With that in mind, registration for the fall conference is open, and we could not be more thrilled with the roster of presenters and ideas for this fall's golden anniversary. We hope you'll join us!

Are you in need of a bursary to get to Camp Muskoka this September? We know this time has presented real barriers to accessing the outdoors, and that professional development opportunities that are live have been few. We are committed to using our robust bursary fund to assist those in need of financial support to join us, whether with a partial or fully subsidized conference fee. Thanks to many years of fundraising efforts and donations, we are grateful to make joining us more accessible. Please see our website for ways to apply.

Our conference theme, "Gather 'Round the Fire" is an invitation to all COEO members—past, present and future—to do as we in outdoor education do so well: come together immersed in nature at beautiful Camp Muskoka to learn and to reflect and to celebrate in the golden hue of September.

As we look forward to gathering 'round, I am struck by both the visceral memory of so many decades we've circled around a fire, and the depth of metaphor we can explore. As members of a very unique community of

practice, we are often the spark within our communities and organizations. We "feed the fire" of curiosity and also contention, as we stretch the comfort zones of students and administrators to safely get students learning and playing outdoors. We feed the fires of connection—with each other and with nature, engaging with vital topics like climate action in powerful ways. We "tend the embers", sustaining relationships and careers by taking time to stoke our own fires, and also sit quietly in the glow, to be warmed by days and lives well spent.

How can this conference and theme of fire prepare us for the great many changes and challenges our province and planet will face in the next 50 years? As you delve into an issue on climate action and education, how is your fire burning?

Like conferences past, again this year we will take the opportunity to recognize individual and group efforts, as well as to celebrate the varied expression of outdoor education within our organization and throughout the province of Ontario. Please consider nominating a deserving colleague or outstanding organization. The online process is simple and very well-worth your efforts to support and celebrate the people who are the heart of outdoor education in Ontario.

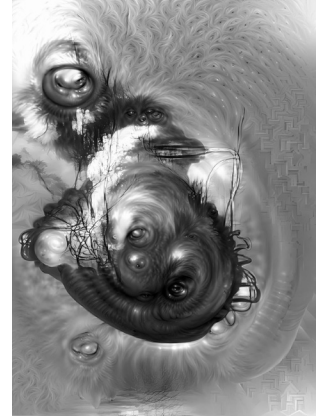
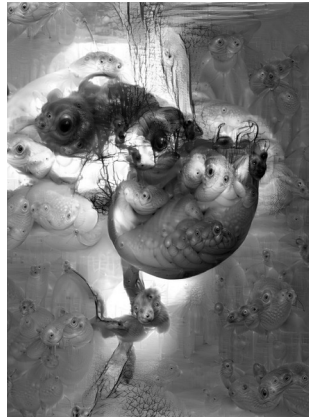
Until we see you in September, enjoy the beauty of the summer season, whether it presents a season of challenge and adventure, of relaxation, or a blend of both.

Karen O'Krafka
President

Sketch Pad – This issue's cover image is a collage by Ruby Allen-Powlesland entitled "Seeds of Hope". Ruby is a recent graduate of the Bachelor of Education program at Lakehead University and is now teaching in the Simcoe-Muskoka region. Ruby's teaching style emphasizes inquiry, ongoing reflection, and planting seeds of hope. Ruby believes these are essential qualities of 21st century learners who are tasked with dreaming up climate solutions and putting them into action. In addition to the artwork contributed by the authors in this issue, additional artwork (pages 8, 16, 20, 22, 28, 30, 32 and 34–35) has been contributed by Jazmine Yerbury. Jazmine is a multi-disciplinary artist. Her practice includes interactive installations, such as the one for Nuit Blanche Toronto at Artscape Daniels, as well as political satire paintings and drawings. Although a native Montrealer, Jazmine has been based in Toronto since 2015.

A Dream, A Reality, and An Accountability

By Tashya Orasi



The three digital images in this multimodal arts-integrated inquiry (Sameshima et al., 2019) are meant to evoke a sense of imbalance, precarity, and connectedness between life and resources on earth. In each, there are multiple sets of eyes from living organisms, each tied to one another in complex and web-like ways and looking toward the viewer as a plea for an encounter that might bring us closer to an understanding of care in multispecies relations (Puig de la Bellacasa, 2017).

Destructive human activity and rising water temperatures have caused environmental imbalances which continue to threaten the survival of whole ecosystems. This series is an inquiry into the finitude of Earth's water resources and the effects of climate change that threaten this vital resource. Combining algorithmic digital editing software, my photos of the Lake Superior shoreline, and photos of the invasive jellyfish as a very real symbol of climate change and lower levels of oxygen in the earth's oceans, the resulting images in this series are intended to raise awareness of the interdependence on water for all life on earth.

Following Haraway (2016), my intent with these pieces is an act of 'multispecies storytelling.' Haraway (2016) writes, "These are stories in which multispecies players, who are enmeshed in partial and flawed translations across difference, redo ways of living and dying attuned to still possible finite flourishing, still possible recuperation" (p. 10). This series is meant to be reflective

of the posthuman desires (Postma, 2020) of survival and flourishing. It is my hope that these pieces serve as pedagogical tools to ask deeper questions of the consequences and reverberations of human activity in the earth's lakes, rivers, and oceans.

References

- Haraway, D. (2016). *Staying with the trouble: Making kin in the Chuthulcene*. Duke University Press.
- Postma, D. (2020). Critical posthumanism in education. *Oxford Research Encyclopedia in Education*. <https://doi.org/10.1093/acrefore/9780190264093.013.1409>
- Puig de la Bellacasa, M. (2017). *Matters of care: Speculative ethics in more than human worlds*. University of Minnesota Press.
- Sameshima, P., Maarhuis, P., & Wiebe, S. (2019). *Parallaxic praxis: Multimodal interdisciplinary pedagogical research design*. Vernon Press.

Tashya Orasi is a PhD Candidate of Leadership and Policy Studies in Education. Orasi identifies as artist, teacher, and researcher while drawing on her interdisciplinary background, she values the intersections of leadership, creativity, and performance in her arts-integrated research practice.

“All Our Relations”

By Holly Groome

The air is crisp this morning. The snow crunches under my mukluks. It is -34 C but feels more like -40 C. Frozen flakes of ice dance in the air and sparkle like diamonds on the snow as the rays of sunlight catch their movements. I try to capture them in still images on my camera but no picture ever really tells the full story of what we see and feel and hear and smell and taste and touch. No image can capture the spirit of this place. No image can replace the connection we have to “All Our Relations.” No image ever really conveys the grandeur of the natural world.

In a paper by Jessica Kaylee, she shares “Richard Wagamese explains that “all my relations” is a sacred saying, and is all about respect. In the reading *Honouring Our Relations: An Anishnaabe Perspective on Environmental Justice* by Deborah McGregor, the author indicates that “all my relations” details First Nations’ care for the environment. McGregor states that “all my relations” is about honouring both living and dead relatives. This value includes natural laws of justice and the belief that all species have a right to a healthy environment.

As I walk this path around the frozen pond, today, I hear the Chickadees calling ‘chick-a-dee-dee-dee’ and the squawk of the Blue Jay and I see the hairy woodpecker on the old dead standing white cedar tree. I stop to look at the 150-year-old white pine I have walked by my whole life. The same one my father, grandfather, and great-grandfather touched before me. The same tree I share with my own nieces and nephews today. I wonder to myself: if pictures are all that is left one day, how will the seven generations after us ever really come to know the land and waters the way I do? If we do not protect our First Mother, what will their relationship with her be? How will they know the spirit of this place the way that I do? My heart hurts

thinking of this profound loss.

The crystals fall softly towards the ground. Landing on the ground my ancestors have walked for five generations. Ground that has been walked by the Anishinaabe, Wendat, and Algonquin People since time immemorial. Today it is unceded and unsurrendered, on the border of the colonial Treaty Agreement known as Robinson-Huron. This place is part of who I am. It is in me like blood in my veins. The spirit of this place travels with me everywhere I go. So much has changed in my life’s relationship with this place. Animal populations have risen and fallen, snow and rain levels are not the same, visits by wolf, otter and deer are nowhere near as frequent. The Grey Jay no longer calls this forest we share home. My relatives are not here in the same way they were when I was young. I know that climate change is a part of this. More people live here now too!

If we open ourselves up to the truth, the truth about our treatment of this land, how does this impact our plan for the future? If we acknowledge the fears we have for the terrible legacy we are leaving behind, how does this impact our plan for the future? For me, the most serious impact of climate change is the impact it has and will have on the human experience and our relationship with land and water and *All Our Relations*.

References

- Agyeman, J., & McGregor, D. (2009). Honouring our relations: An Anishinaabe perspective on environmental justice. In *Speaking for ourselves: Environmental justice in Canada* (pp. 27–43). essay, UBC Press.

Cornell Lab of Ornithology. (2019). *Blue Jay sounds, all about birds, Cornell Lab of Ornithology*. All about birds, Cornell Lab of Ornithology. Retrieved April 23, 2022, from https://www.allaboutbirds.org/guide/Blue_Jay/sounds

Dubois, S. (2021, February 7). *Canada Jay numbers in southern Ontario decreasing because of climate change, study suggests* | CBC News. CBCnews. Retrieved April 23, 2022, from <https://www.cbc.ca/news/science/canada-jay-numbers-ontario-climate-change-1.5902929>

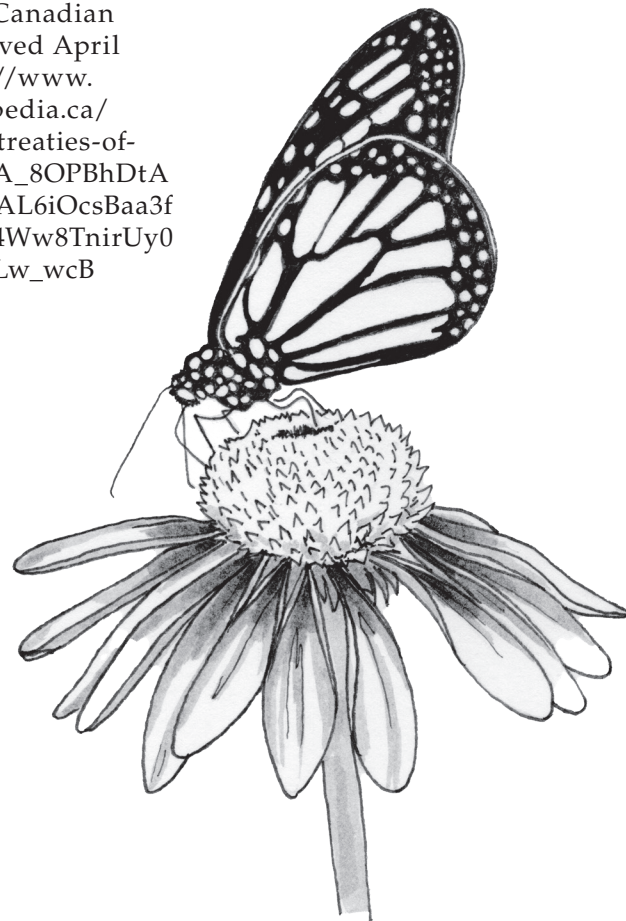
Government of Ontario (2022). *The Algonquin land claim*. ontario.ca. Retrieved April 23, 2022, from <https://www.ontario.ca/page/algonquin-land-claim>

Hele, K. S. (2020, March 12). *Robinson Treaties of 1850*. The Canadian Encyclopedia. Retrieved April 23, 2022, from https://www.thecanadianencyclopedia.ca/en/article/robinson-treaties-of-1850?gclid=Cj0KCQiA_8OPBhDtARIsAKQu0gZiiKTV8AL6iOcsBaa3fQD0AbDJ2vI7E8wgt4Ww8TnirUy0KWBL7PMaAs3gEALw_wcB

Kaylee, J. (2015, November 8). *All-my-relations. First Nations perspective*. Academia.edu. Retrieved April 23, 2022, from https://www.academia.edu/17984582/All-my-relations._first_nations_perspective

Wagamese, R. (2016). *Embers: One Ojibway's meditations*. Douglas & McIntyre

Holly Groome has been an educator, instructional leader, and curriculum consultant for more than 20 years, and is currently completing her MEd in Indigenous Education. Her passion for teaching, learning, and unlearning, is grounded in reciprocal relationships with the Lands, Waters, Indigenous communities of Turtle Island.



Disenchantment to Re-Enchantment: Navigating Climate Change Through Place and Land Relationships

By Neal Jankowski

Some natural spaces have the power to enchant you. They draw you in with their beauty, comfort you, and awaken you. They make gratitude tangible. They seem stoic, yet they are vulnerable, and resilient. They have stood the test of time. They hold stories. They possess answers. They are a gift.

There is a side trail on the Bruce Trail that has such a potential for enchantment and re-enchantment. It has been given the name of Metcalfe Rock. Is this a colonial name? Is it the name of a white settler who obtained property nearby? In just 15 minutes from the road you can reach a lookout. In that short time alone, you can pass by millions of years of history this land holds, from the climb up a steep talus slope to traversing along crevices that allow you to peer into the soul of an ancient escarpment. Once mustering up the courage to carefully step out for a view from atop the rock, you can see the division of land as property across the road. This stark visual of seeing land divided into sections from the wild side, provides insight on how, “Settler colonialism ‘works’ by making Indigenous land into property” (Webber, 2021, p. 19). From this vantage point, you can get a sense of the land before the idea of ownership. This perspective awakens the notion, “That where settlers claimed individual ownership of land, Indigenous peoples felt they belonged to the land” (Seawright, 2014; as cited in Webber, 2021, p. 19). If this land could speak, I wonder what it would say as it witnessed events like colonization, industrialization, and increased tourism.

As one learns about Canada’s history, and the challenges of climate change, we uncover many emotions that can lead to disenchantment. Robateau (1995) states that, “The disenchantment of the

world is a fundamental characteristic of the development of modern industrial society, which stands in stark contrast to preindustrial societies for whom the world remains enchanted” (p. 392). If our childhood innocence and enchantment with the world becomes disenchanting from increased knowledge of injustices, is it possible to become re-enchanting?

Can this shift our perspectives from bitter pessimism to optimistic hope? Robateau explains that, “Education plays a paradoxical role as both a cause of the problem and a source of the solution. Education is one of the social processes that disenchant us, but it also has the capacity to help re-enchant our world” (Robateau, 1995, para 6, p. 392). By reconnecting with nature and by interpreting land in a new way, re-enchantment seems achievable.





Metcalfe Rock is in the Kolapore Uplands Resource Management Area on the Niagara escarpment; a United Nations Educational, Scientific, and Cultural Organization (UNESCO) world heritage site. The Kolapore Uplands is deemed public land under the Niagara Escarpment Parks and Open Space System (NEPOSS). As a result of being in this NEPOSS Resource Management Zone, many organizations are involved in overseeing the activity in the Kolapore Uplands including Grey County, Grey Sauble Conservation Authority, Ministry of Natural Resources and user groups such as The Kolapore Wilderness Trails Association (Ministry of Environment, Conservation and Parks, 2021). Such involvement shows the importance of this particular land as a place for humans and non-humans. This place is home to many human visitors for a variety of activities that allow them to engage with nature. This site now has 50 km of recreation including trails for hiking, biking, cross country skiing, snowmobiling, rock climbing, and caving (Kolapore

Wilderness Trails, 2022). The land here provides the potential for people to engage with nature on a deeper level. Pelo (2014) writes, “To foster a love for place, we must engage our bodies and our hearts—as well as our minds—in a specific place. Intellectual and critical knowledge needs a foundation of sensual awareness” (p. 44). Metcalfe Rock provides the foundational sensual awareness needed to develop a critical knowledge of place and land.

A critical lens needed to examine not only who benefits from this place today, but also which Indigenous groups benefited from a relationship with this land pre-colonization and during colonization. According to the Ministry of Environment, Conservation, and Parks (2021), the adjacent Duncan Escarpment Provincial Nature Reserve is not subject to any Aboriginal Land Claims. The Ministry explains that there are no published reports on cultural heritage, but that future planning will use the provincial framework to identify cultural heritage values and features within the park (Ministry of Environment, Conservation and Parks, 2021). Lack of land acknowledgement information on that website highlights the shortcomings of the Western systems’ lens. This shortcoming emphasizes the need to integrate Indigenous Knowledge and voices to capture the complex history of this area previously inhabited by the Petun (Native Land Digital, 2021). A critical Indigenous pedagogy can inform visitors that in the 14th, 15th and 16th centuries when the arrival of European goods and people began, Iriquoians of the Toronto area moved north to Georgian Bay and Lake Simcoe via the Toronto passage. During this time, many joined the Huron Wendat, but some joined the neighbouring Petun inhabiting the Nottawasaga Highlands where Metcalfe Rock is located (City of Toronto, 2022). By developing a love of place and connection to land, viewpoints can be expanded towards a transformative perspective that can help to interpret complex issues.

Metcalfe Rock holds its secrets close. Once you step on the trail, you can feel the excitement that you are going somewhere special. There is a bridge over a little stream to the untrained eye. Look closer, and you will see that the cold, pure water gushes out of a spring on the slope. This year-round, constant flow allows refreshing groundwater to see the earth's surface just after meandering through caves 30 metres below the escarpment. After the bridge, the trail leads you up a steep talus slope and around the side of the towering dolomite cap rock towards a massive crevice. As the trails lead you in, the temperature gets noticeably cooler by a few degrees, and the vegetation gets lush and green thriving from the deep till formed from thousands of years of hummocky moraine deposits. A sensory experience that the land has been designed to awaken your senses physically, as if to make sure you are paying attention. Looking at the steep walls on either side, massive outlier blocks are cantilevered and pitched forward allowing sunlight and precipitation to pour in creating ideal moist conditions for thick moss, lichens and a variety of ferns and other rare species of plants (Ministry of Environment, Conservation and Parks, 2021). This creates a feeling of looking back in time millions of years ago, or a feeling of transporting you to a tropical part of the world where this ecology would be more expected.

A stark reminder that this escarpment was formed 450 million years ago during the late Ordovician period, when it was under shallow seas south of the equator. These rocks witnessed diverse seas, early coral reefs and the time when algae was the only multicellular plant (Ancient Earth Globe, n.d.). Today, in this space and time, ancient Eastern white cedars cling to the cliff faces, growing from tiny ledges with just a tablespoon of soil that defy the odds of survival. They appear to be merely saplings, but in reality, this is a community of cedars that have proved their resiliency over hundreds

of years. Nestled between the dolomite rock walls of the crevice, there is a tree, known as the 'braided root tree'. Upon inspection, it can be seen that the tree began growing from the ledge on the rock like the other stunted cedars in its community. However, this cedar has a large root system that comes down to the ground, twisting and turning in a braided pattern that is extremely strong and shows the wear of hundreds of years. It has come to my attention that some Indigenous groups find this phenomenon to be a portal. Upon introspection, this has become a portal to a space to contemplate my own inquiries, sparking joy and curiosity while pondering the marvels of the brilliance of the natural world each time I visit.

What is the story this tree could tell about its transformation from a slow and stunted start from the rock, to a large braided root system where roots reach the soil to flourish? Taking in the surroundings, there are other trees that have fallen from the top due to erosion, and into the crevice below that provide some ideas for inferencing. A story it



may tell involves the idea that a tree fell from above and leaned against the rock wall and the small tree's roots, providing an opportunity for the little tree to use the deadfall to reach the ground, by wrapping around the fallen tree on the way down. Through perseverance and resilience, this little tree finally obtained what it needed to grow to be a large and strong tree capable of withstanding the elements for hundreds of years. Roboteau (1995) writes that, "Re-enchantment is a consciousness that develops in a person who has first had the world disenchanted but then returns to the world fully conscious of the previous stages of experience. This third stage of mature consciousness is the beginning of true wisdom" (p. 392). As we face a changing climate, we are being called to action to change behaviours to protect a natural world we are disconnected from and perhaps, disenchanted with. By reacquainting ourselves with places and finding appreciation for the intricate design of land and the full history of significant relationships with it, we are investing in a psychological readiness for a collective consciousness to conserve the Land and the relationships wherein place exists. Adopting attitudes where we can learn how to pay attention will let us be re-enchanted, and be motivated to reinvent our existence.

References

- Ancient Earth Globe. (n.d.). *What did Earth look like 450 million years ago?* Retrieved from <https://dinosaurpictures.org/ancient-earth#450>
- Kolapore Wilderness Trails: About. Kolapore Wilderness Trails. (2022). Retrieved from <http://www.kolaporetrails.org/about>
- Duncan Escarpment management statement: Amendment. Ministry of the Environment, Conservation and Parks. (2021). Retrieved from <https://www.ontario.ca/page/duncan-escarpment-management-statement-amendment>
- (2021). *Petun territories*. Native Land Digital. Retrieved from <https://native-land.ca/maps/territories/petun/>
- Pelo, A. (2014). A pedagogy for ecology. In B. Bigelow & T. Swinehart (Eds.), *A people's curriculum for the earth* (pp. 42-47). Rethinking Schools.
- Raboteau, Albert J. (1995). Re-enchanting the world: Education, wisdom, and imagination. *Cross Currents*, 45(3), p.392. 11p.
- First Peoples, 9000 BCE to 1600 CE*. City of Toronto (2022). Retrieved from <https://www.toronto.ca/explore-enjoy/history-art-culture/museums/virtual-exhibits/history-of-toronto/first-peoples-9000-bce-to-1600-ce/>
- Webber, G., McVittie, J., Miller, D., Hellsten, L. (2021). The terrain of place-based education: A primer for teacher education in Canada. *Brock Education Journal*. 30(1), 10-29.
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A Cycle of a Year

By Alicia Colavito



This video is a dance piece that is composed of four dancers where each dancer represents a season. The video begins with a monologue to introduce the audience to the concept of the dance piece. The monologue describes key features of each season, highlighting all the important changes that transpire throughout one year. The dance starts with winter. In the video, I describe this season to be still and at rest; this is why I had the other seasons frozen in the background while I (winter) am dancing on my own. I danced sharply and stopped when the music stopped to demonstrate how everything is frozen and stiff. Slowly the other seasons started to move during winter's section. This was to show the melting of the ice that happens at the end of winter. Spring begins when spring and winter change places. The movements during this time represent things growing. There was a lot of stretching of the arms, legs, and bodies to show the growth. Movements became more soft to show the warmth in season and the general playfulness spring brings cause children usually play outside more as the weather becomes warmer. Then the summer season starts when the dancer does an aerial. The movements in this part range from soft and slow to energetic and fast. This is because summer can be both exciting as it is a time where a lot of things happen at once. All the animals are out, all plants are in full bloom and people usually do high energy activities outside since the weather is warm enough. At the same time, summer is associated with relaxing and calmness due to this season being related to having a break from people's daily lives. At one point in this part,

the three other seasons are in the back swaying from side-to-side to represent the trees moving in the warm breeze that is controlled by the summer dancer.

As well, near the end of the minute for summer there is a moment where the summer dancer faces the rest of the seasons to represent people's attitude to the change in seasons, since it is natural for humans to not want cold weather to arrive again. There is a moment of denial where summer falls onto fall then quickly tries to ignore the change as people can have the same resentment by the changing seasons too. However, in the end there is acceptance because no one can control how the season changes, therefore, they force people to adapt to the change. Lastly, fall comes to lead the dance. In this season, the dance is more sloppy and has a lot of jumping in it because of the leaves falling and plants dying, so not much energy is needed to be precise and clean with the movements for fall. The reason being that fall's beauty lies within how messy it can be. Finally the video ends with spring, summer, and fall running off leaving winter all alone because it is the start of winter again, continuing the cycle of seasons. In all, this piece was created to promote great appreciation of the four seasons. For if no one wants to preserve what we have, then how can we expect things to get better?

Access video here: <https://www.youtube.com/watch?v=H6OqPreFiLY>

Alicia Colavito's educator pedagogy is rooted in hands-on experiences that are inclusive, creative, meaningful, and bring excitement back into learning. Colavito has a passion for the performing arts as she has grown up participating in competitive dancing, performing in school theatre productions and singing.

Year of Climate Action Research Project - 1492 Land Back Lane

By Doris Espinoza

This research project focused on the events that took place at the site of a land reclamation by members of Six Nations at 1492 Land Back Lane. The land defenders continue to occupy the site to protect the land for future generations. In defending their land rights in Haudenosaunee territory, the land defenders are also protecting the health and survival of the land and waters in the area.

The Haudenosaunee and Their Connection to the Land and Water of Their Ancestors

The Haudenosaunee peoples are comprised of six nations, Mohawk, Oneida, Onondaga, Tuscarora, Seneca, and Cayuga. Their connection to the land is reflected in many ways, including the nation names. For example, Oneida “Onyota’a:ka” means, People of the standing stone and Cayuga, “Gayogohono” means, People of the marshy area (Hill, 2017, p. 7). The land is valued, respected, and cared for by the Haudenosaunee People and tied to their identity.

The Haudenosaunee creation story also highlights the connection to the land. As it states, the land was created when Sky Woman fell through a hole in the sky.

“She dropped from her home in the air and was gently guided down onto the back of a turtle by the animals that lived on Earth. The water animals, Beaver and Otter, worked to prepare a home for her by grabbing mud from the bottom of the ocean, and placing it on the turtle’s back. This mud grew and grew and became the traditional lands of the Haudenosaunee peoples” (Toulouse, 2018, p.46).

The creation story highlights the dependence on the natural world for survival. Without the animals spreading

the mud on the turtle’s back, Turtle Island would not exist today. Also, in the creation story, the first person on the earth is born from the ground (Hill, 2017, p. 15). Environmental stewardship is rooted in these teachings and understandings of how the world came to be.

The Seventh Generation value also highlights the connection to the land and how it must be protected for future descendants: “Nations are taught to respect the world in which they live as they are borrowing it from future generations” (Haudenosaunee Confederacy, 2021). This value is entrenched in Haudenosaunee laws and how they make decisions about the land.

There are also agreements between settlers and the Haudenosaunee that designate the relationship to the land. One agreement is the two-row wampum belt, “... a reminder of the teachings that Indigenous and non-Indigenous cultures can only live in peace if each nation respects the other’s way of life” (Toulouse, 2018, p. 20). The belt represents an ever-flowing river where two nations travel alongside each other, parallel and never crossing paths but remain connected by the river (Hill, 2017, p. 86). Another agreement is the Haldimand Proclamation of 1784 that granted the Haudenosaunee the Haldimand Tract to hunt, fish and live on for future generations. These agreements have not been respected by the Crown resulting in the encroachment of lands on Haudenosaunee territory. Over the years land reclamations by Six Nations members have called attention to these pre-existing relationships between people and the land.

Description of the Events at 1492 Land Back Lane

1492 Land Back Lane is near the Six Nations reserve in Caledonia, which is the only reserve in North America where members from all the Six Nations live together. It is also the most populated in Canada with 12,892 members living on the reserve (Hele, 2019). The growing population has called attention to the need to take care of the land for future generations. On July 19, 2020, a group of land defenders set up camp on the site of a proposed development project, the McKenzie Meadows. The land defenders sought to stop the construction of the development as it was being done on unceded Six Nations territory and without the consent of the Haudenosaunee peoples. One of the land defenders, Skyler Williams mentioned in an interview, "We already have a deed to the land. We never surrendered the land" (Talaga, 2020). The developer, Fox Gate, responded to the reclamation by applying for an injunction to have the land defenders forcibly removed. The courts approved the injunction, and the Ontario Provincial Police arrested many of the land defenders. What followed was a series of protests and road blockades involving Six Nations, and outside community members supporting the action. After a year of lengthy court proceedings, blockades, and heavy policing by the OPP worth \$16 million, the Fox Gate development company cancelled the development project. Today, the injunctions remain and there is still no new recognition by the courts that the land is Haudenosaunee territory. The land defenders remain on site and have built tiny homes, set up communal spaces for meeting, and gardens. The land defenders will continue to be on the land and protect it for future generations, as Williams stated, "And so for us, this is something that's going to be ongoing, not just for my generation, but for generations to come" (Craggs, 2021).

Different Viewpoints on 1492 Land Back Lane

Six Nations Elected Band Council

The Six Nations Elected Band Council is the official representative of the Six Nations to the Crown. They initially agreed to the development project at McKenzie Meadows and signed documents giving their consent. In the aftermath of the action at 1492 Land Back Lane, they acknowledged that no development should continue in the Haldimand Tract due to the "uncertain legal environment" (Taekema, 2021). They have also asserted that the Haudenosaunee peoples as a whole need to be included in the process of deciding what happens with the lands.

Haudenosaunee Women

A group of Haudenosaunee women issued a statement asserting that the land defenders should be supported by the community, and the court injunctions stopped. In their words, "Courts violate and criminalize the rights and responsibility of our women by preventing us from fulfilling our responsibilities to the land and our future generations in accordance with Haudenosaunee Law" (Yellowhead Institute, 2020). The Haudenosaunee are a matriarchal society, and as such decisions about the land need to be made with the consent of the women.

Provincial and Federal Governments

During the protests, the provincial and federal governments maintained the position that they were open to having dialogue with the community to resolve the issue. Prime Minister Justin Trudeau stated, "We need to come together to find a peaceful resolution to this that involves the entire community and I look forward to continuing to work seriously on finding the right path forward for everyone in the region" (APTN National News, 2020). Similarly, the Ontario

Premier, Doug Ford stated, “I’m a strong believer in collaboration, in sitting down, communicating” (APTN National News, 2020). Ford also condemned any violent actions taken by the protesters stating he would do what was necessary to protect the police if they were met with violence, “I don’t care who you are, you start attacking our police, I’ll come out swinging—simple as that” (APTN National News, 2020).

Impact of Climate Change on These Lands and/or Waters

One of the UN Sustainable Development Goals involves building sustainable cities and communities (Goal 11). This goal is a response to rapid urbanization across the world. As described, “Rapid urbanization is resulting in a growing number of slum dwellers, inadequate and overburdened infrastructure and services (such as waste collection and water and sanitation systems, roads and transport), worsening air pollution and unplanned urban sprawl” (United Nations, n.d.). This issue also impacts Canada as there is a housing crisis that requires that more homes be built. The building of homes however results in actions that increase greenhouse gas emissions: “Bigger homes require more materials and more energy to cool and heat, and the larger spaces often lead to residents filling them with more “stuff,” which also have carbon footprints” (Powers, 2021). The events at 1492 Land Back Lane offer an example of direct action that has been taken to prevent the loss of biodiversity and increased greenhouse emissions from new developments. Homes should be built sustainably in a way that allows people and the land to coexist.

In a report titled, “The Red Paper” by Yellowhead Institute, a First Nations-led research centre, it examines how reclamation efforts led by Indigenous Peoples can help to address climate change. The paper examines how Indigenous Peoples maintain biodiversity in their lands due to their cultural

values (i.e., reciprocity, responsibility), and practice stewardship of the land. As they state, “So the matter of land back is not merely a matter of justice, rights or “reconciliation”; Indigenous jurisdiction can indeed help mitigate the loss of biodiversity and climate crisis” (Pasternak & King, 2019, p. 64). As an example of this commitment to stewardship and fighting climate change, the Six Nations have applied to be registered with United Nations Framework on Climate Change. As stated in a report written by the Six Nations Lands & Resources Department, “Our goal is to make Six Nations a “carbon neutral territory” (Six Nations Lands & Resources Department, 2019, p. 24).

Consequences and/or Changes Made Because of This Action or Event

1492 Land Back Lane drew public attention to the encroachment of the land on Haudenosaunee territory. Community members came together to create a physical presence that ultimately resulted in the developers cancelling their project. The action at 1492 Land Back Lane was also followed by a moratorium being issued on the development of the lands along the Haldimand Tract. The moratorium was issued by the Haudenosaunee Confederacy Chiefs Council, the traditional government of Six Nations. Their leadership is comprised of Chiefs who are chosen by the Clan Mothers. The moratorium issued demands that all development be stopped along the



Haldimand Tract without the consent of the Haudenosaunee. They assert their position in that they seek to protect the lands and the waters for the survival of future generations. As mentioned in their Land Rights Statement, “Land is envisioned as *Sewatokwa’tsherea’t*, (the Dish with One Spoon); this means that we can all take from the land what we need to feed, house and care for our families, but we also must assure that the land remains healthy enough to provide for the coming generations. Land is meant to be shared among and by the people and with other parts of the web of life. It is not for personal empire building” (Protect The Tract, 2005).

Here there is a clear declaration made on the meaning of land ownership, it is not about who owns the land, but about protecting it and being stewards of the land. This moratorium was also later supported by the Elected Band Council of Six Nations. The moratorium has also resulted in another environmental initiative that highlighted the importance of sustainable development that doesn’t further damage the ecosystem. A canoe trip was organized by members of Six Nations to investigate the water crisis on the reserve while at the same time recognizing the moratorium. The canoe trip highlighted the pollution that has been building up in densely populated areas of the river (Antonacci, 2021).

The actions by Land Defenders at 1492 Land Back Lane were necessary in a context that forgets the Haudenosaunee treaty rights and their relationship with the land. It is also one of many other land disputes across Turtle Island (Government of Canada, 2020) where Indigenous Peoples and communities are continuing to come together and organize to protect the land and water. As the Yellowhead Institute states, “...given the denial of the climate crisis and ongoing erasure of Indigenous jurisdiction by states, and especially settler states, we also have to acknowledge that solutions might have to be realized outside of state

processes. In fact, they may be more conducive to asserting alternative futures for life on this planet” (Pasternak & King, 2019, p. 12).

References

- Antonacci, J. P. (2021, June 29). ‘Water crisis’ on Six Nations: Indigenous paddlers see a Grand River devoid of life. *Thespec.Com*. <https://www.thespec.com/news/hamilton-region/2021/06/28/water-crisis-on-six-nations-indigenous-paddlers-see-a-grand-river-devoid-of-life.html>
- APTN National News. (2020, August 22). *Trudeau, Ford address Caledonia conflict as land defenders fear vigilantism*. APTN News. <https://www.aptnnews.ca/national-news/trudeau-ford-address-caledonia-conflict-as-land-defenders-warn-of-vigilantism/>
- Craggs, S., & D.B. (2021, July 2). *Year-long Six Nations protest forces cancellation of major development in Caledonia, Ont*. CBC News. <https://www.cbc.ca/news/canada/hamilton/caledonia-development-cancelled-protests-1.6088130>
- Forester, B. (2021, July 19). *The standoff at 1492 Land Back Lane, one year later*. APTN News. <https://www.aptnnews.ca/national-news/the-standoff-at-1492-land-back-lane-one-year-later/>
- Ongoing negotiations*. Government of Canada. (2020). Retrieved from <https://www.rcaanc-cirnac.gc.ca/eng/1100100030285/1529354158736>
- Haudenosaunee confederacy*. (2021, June 9). *Values*. <https://www.haudenosauneeconfederacy.com/values/>

- Hele, K. S. (2019, June 14). *Reserves in Ontario*. The Canadian Encyclopedia. <https://www.thecanadianencyclopedia.ca/en/article/reserves-in-ontario>
- Hill, S. M. (2017). *The Clay We Are Made Of: Haudenosaunee Land Tenure on the Grand River (Critical Studies in Native History, 20)* (1st ed.) [E-book]. University of Manitoba Press.
- Pasternak, S., & King, H. (2019, October 29). *Land Back- A Yellowhead Institute Red Paper*. Land Back: A Yellowhead Institute Red Paper. <https://redpaper.yellowheadinstitute.org/>
- Powers, L. (2021, September 9). Can Canada solve its housing crisis without making climate change worse? *CBC News*. <https://www.cbc.ca/news/canada/toronto/housing-climate-crisis-federal-election-canada-1.6168563>
- Land Rights Statement*. Protect The Tract. (2005, November 4). <https://www.protectthetract.com/land-rights-statement>
- Six Nations Lands & Resources Department. (2019). *Land Rights for the Six Nations of the Grand River- A GLOBAL SOLUTION*. Six Nations Lands and Resources. <https://iaac-aeic.gc.ca/050/documents/p80100/130877E.pdf>
- Taekema, D. (2021, April 27). *Six Nations elected chief stresses unity, reiterates call for moratorium on development*. *CBC News*. <https://www.cbc.ca/news/canada/hamilton/six-nations-mark-hill-development-moratorium-1.6004237>
- Talaga, T. (2020, November 19). *Caledonia's 1492 Land Back Lane camp is a monument to the justice Canada has denied*. *The Globe and Mail*. <https://www.theglobeandmail.com/opinion/article-caledonias-1492-land-back-lane-camp-is-a-monument-to-the-justice/>
- Thompson, B. (2020, August 7). *Haldimand mayor issues statement on Caledonia protests*. Brantford Expositor. <https://www.brantfordexpositor.ca/news/local-news/haldimand-mayor-issues-statement-on-caledonia-protests>
- Toulouse, P. R. (2018). *Truth and Reconciliation in Canadian Schools*. Winnipeg: Portage & Main Press.
- United Nations. (n.d.). *Cities*. United Nations Sustainable Development. <https://www.un.org/sustainabledevelopment/cities/>
- Yellowhead Institute. (2020, October 6). *Statement from Concerned Haudenosaunee Women Regarding Injunctions at 1492 Land Back Lane*. <https://yellowheadinstitute.org/2020/08/24/statement-from-concerned-haudenosaunee-women-regarding-injunctions-at-1492-land-back-lane/>
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- Doris Espinoza is completing her BEd within the primary/junior division at Lakehead University. Here, she seeks to create an inclusive learning environment that provides students with opportunities for critical thinking.*

The Summer of Fire

By Julia Mills

In expressing my thoughts on climate change I wanted to touch on my feelings about the increase of wildfires in Canada this past summer. Due to climate change there has been an enhanced drying of organic matter in forests; this matter consists of partially decomposed plants and animal matter. As well, there is increased drought, resulting in a longer fire season and increased wildfire risk throughout Canada and the United States.

According to the National Wildland Fire Situation Report, “Nationally, there has been 6,224 fires to date” (Canada, N. R., 2021) and an area burned that is over 4.18 million hectares. As well as this, they state that last year at this time, there were only 3,665 fires and an area of 236.956 hectares burned. Since there was such an increase of fires across Canada there was also an increase of smoke. In the city of Thunder Bay, where I live, and other surrounding areas there were special air quality statements, stating that there was poor air quality and reduced visibility. Many news outlets told us to take extra precaution and reduce exposure to the smoke because, “wildfire smoke is a constantly-changing mixture of particles and gasses which include many chemicals that can be harmful to your health” (TBNewsWatch Staff, 2021). From this information and the fact that I was so close to the fires happening, I thought it was especially important to create a piece that represented this past summer’s increased number of wildfires in Canada.

References

Canada, N. R. (n.d.). *National wildland fire situation report*. Canadian Wildland Fire Information System. Retrieved from <https://cwfis.cfs.nrcan.gc.ca/report>.



TBNews Staff. (n.d.). *Air Quality Advisory issued for city due to Forest Fire Smoke*.

TBNewsWatch.com. Retrieved from <https://www.tbnewswatch.com/local-news/air-quality-advisory-issued-for-city-due-to-forest-fire-smoke-4186501>

Julia Mills is an artist, student, and soon to be educator, currently in her first year of the Consecutive Bachelors of Education Program at Lakehead University. She has completed her Honours Bachelor of Fine Arts as of 2021 and strives to bring in her creative knowledge and attributes into her future teaching career.

Dear Older Generations

By Maddy Lamers

Dear Older Generations,
We were kids. What were you expecting? You left Generation Z to be the test dummies. Yet you still have the audacity to call us "soft"? You created these tiny, green, "brainwashing" pixelated screens. And we fell for it. Hard. Were we not supposed to? Was it meant as a temporary distraction for us while you destroyed our Earth?

Dear Older Generations,
We know you were tougher. You walked up a mountain there and back to get to school. You solved fights physically. Bullies were real people and not anonymous black screens. We know you have more essential hands on skills than us. You do not let us forget.

Dear Older Generations,
We sat at computer screens. The same ones you created. The same ones that contained pornography, violence, conspiracies, and a variety of other criminal content that with the simple click of a button. We could access all of this before we could even recite half of the multiplication table. But at least we had Webkinz, right?

Dear Older Generations,
The minds of our generation are the ones that are chemically altered from unmonitored, and unsupervised exploration of the Internet. Those darn screens, right? Can we ever put them down? Does the manipulation of dopamine that the Internet possesses over our brains label us as true, suffering addicts? Or are still too soft for not being able to go a day without our phones?

Dear Older Generations,
Our generation is not "soft" for advocating harder than ever for mental health. We are not trying to get out of our responsibilities and make them easier. We are advocating for healing all of your wrong doings, for us, and for you. It's okay, you didn't know any better. But you do now.

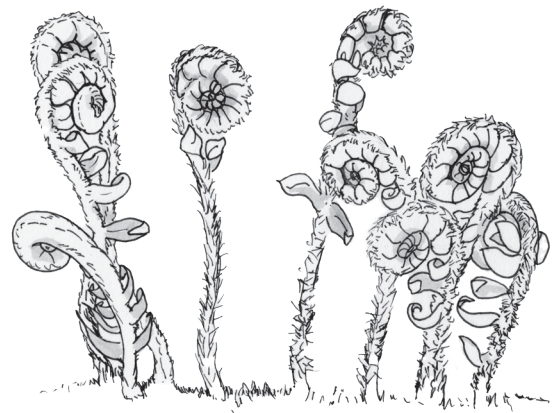
Dear Older Generations,
Our hope to create normalized, and globalized mental health awareness should be inspiring given the fact our planet is on track to not being able to give us enough time to achieve this. Truthfully, none of this really matters if Earth is going to die anyways and take us all down with it. So, I must applaud you for making it this far, I can see that you care.

Dear Older Generations,
You did not have the resources to aid and understand mental health. Nor did you have the tools and knowledge required to save the planet. You probably didn't even know you were killing it. And we are sorry these things were not available to you, but they are now, and we hope you use them alongside us.

Dear Older Generations,
So, no, we can't work a rotary phone. But we can save the damn planet.

Sincerely, Generation Z

Madelyne Lamers is a student, currently completing her BEd in Indigenous Education in hopes to pursue her career as an aspiring educator. Her pedagogy is grounded in differentiated instruction which allows her to create and coordinate lessons that best benefit a variety of learners.

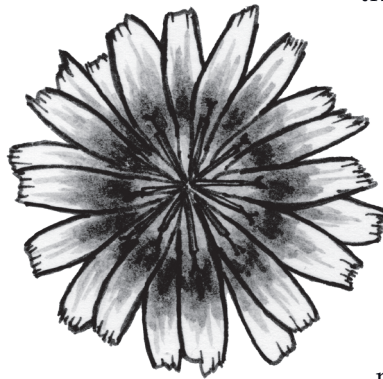


Susceptibility - Accountability - Dichotomy

By Emma Stam



As I gathered the leaves outside, it began to rain. I love the rain. Walking in the rain makes me feel most alive. The current season supported my painting due to the leaves that have died and fallen on the ground. I used the dead leaves to create an effect of the death of nature protruding from the border from all sides. The naked woman in the fetal position is to portray human vulnerability. Behind the woman are three abstract figures, the night, the day, and fire. The woman is held by two fern-like leaves representing life, with water flowing beneath her. The idea is that when death seems to be all around us, and feelings of being overwhelmed are closing in, the great forces of our environment still hold us, and each element provides for us and takes care of us. Furthermore, through connecting with our environment, we can process our uncomfortable feelings, restore ourselves, and focus on putting our energy into taking care of our environment as it does for us.



The climate crisis *is* scary, terribly scary, and we *should* feel scared and anxious when something scary is happening. The issue is that if we choose not to act, engage, or express ourselves when feeling discomfort, we instead will ignore, disengage, and isolate. "We need to allow ourselves to feel and process the real information about climate change" (BBC, 2019).

I began my university course on Climate Change Education in a state of denial and somewhat blissful ignorance. Still, deep inside me, I knew, and my body knew, that I was ignoring something that was deeply connected to me. Throughout the course, I reflected on my personal impacts and made changes in my

everyday life that positively affected the environment. The result of doing so was actually quite positive for me as well. Furthermore, I felt a sense of pride and accomplishment because I was doing the right thing. I could actually feel a lift in my spirit because I was connecting with the truth and the part of me that knows how intricately connected I am with the environment. After acting on climate change by making personal changes, feelings of sadness, fear, and powerlessness would still arise.

However, through engaging with the environment around me, I found refuge. Walking through the forest and by our Great Lake Superior made me feel held, supported, and safe. The beauty and perfection of the nature around me made me feel like everything will be okay; it helps me process my thoughts and feel connected to more than just myself and the people around me. Recently, I found respite in expressing myself in regards to climate change through painting, as depicted here.

References

BBC Ideas. (2019, August 20).[Youtube] Climate Change: Do you have Eco-anxiety? [Video file]. Retrieved from Climate change: Do you have eco-anxiety? | BBC Ideas - YouTube

Emma Stam is a current student finishing her Bachelor of Education, about to venture into her first teaching position for Lakehead Public Schools in Thunder Bay, Ontario. Stam is passionate about continuously supporting her students by empowering them to partake in climate and social justice while creating student voice and expression opportunities.

How to Weigh a Plane in the Modern Day

By Hannah Winger

If there's one thing that I've learned about climate change
It's how much the math just doesn't add up
Stretching numbers and facts creates
problems of unequal exchange
And the solutions seem to spell certain
doom, or at least a blow-up.

A perfect formula for guilt and for shame,
I put my duty to the planet against my
duty to myself,
As though they are even slightly the same.
On one hand – forests, seas, the Arctic ice
shelf,
On the other – emotions for which I'm to
blame.

To showcase the complex problem that lays
in front of me,
Allow me to introduce some numbers,
figures, and scales.
Days George has been my boyfriend: five
hundred and forty-three.
A flight booked, fifty-eight days until the
flight over to Wales.
Which releases one point six nine tonnes
of CO2 we don't even see.

Considering zero in our heads, one point
six nine's fairly near,
Not even two, but then its tonnes of a
known climate heater.
Do some math with the height of the flight
and it'll appear
Like driving six thousand eight hundred
and thirty-five kilo-meters
Which is a lot of carbon dioxide directly
into the atmosphere.

This only accelerates climate change,
faster every single day,
And one point six nine tonnes for a round
trip more than my share.
Irreversible burning, like piles of
cigarettes in an ashtray,
Which makes me question how selfish this
is, and what's truly fair,
How much is allowed, and when and
where, and who's to say.

Ethically, morally, should I even consider
the flight?

I tread lightly every day to reduce my
carbon footprint
Surely, I can afford an expense, it's well
within my rights
Just this one time, one cost, once, one, one,
one carbon-spending stint
And is it better if I say I'm spending over
twenty nights?

Why should I, or why should you, have to
make the sacrifice?

It should be corporations that spew
emissions to fuel their ambitions
There's any number of culpable parties,
take your pick and roll the dice
Or the mining companies, or the
governments, or people with petitions,
Or or or... someone else to pay the price.

I certainly care about our planet more
than about money
Though that's not a viable survival
strategy in our society
I don't want to see floods, fires, deaths, or
even loss of honey
Nature's suffering upsets me, exacerbates
my anxiety.
All these apocalypse jokes aren't even
really that funny.

And indulge me for a moment to forget
the numbers and the math.
I want to see George, my boyfriend, after
waiting for so long
It's a dream, it's a wish, it's the hope that
keeps me on the path
Toward the future, it's a vision that helps
me move along
But it comes at a carbon cost that helps us
incur the planet's wrath.

So how do I weigh this dilemma, set this
problem on some scales?
Do I count that if I weren't in seat 41A,
another person would be?
It takes a pandemic to stop airlines, and
even then, there were some sales

On a chart of daily emissions, one point
six nine's is too small to see.
Should I forget this angst, enjoy my life,
and just fly to Wales?

I don't have any answers, beyond my own
plans and desires,
And I should give in, give up and visit
while I still possibly can
Before the unstoppable change stops me
and all other fliers.
I'm just a background character in this
story of nature versus man.
I'll play my part, play along, while our
own demise conspires.

I will indulge in my humanity and my
flawed, imperfect fate.
I won't save the world, but I will keep
moving forward toward
A future filled with creative innovations,
that uniquely human trait.
My impact's never zero, but different
paths can be explored,
If we all look to the future and see our
actions all have weight

So, in fifty-eight days I will take a flight
across the ocean,
And meanwhile I'll recycle, walk places,
and continue to learn.
I'll fight hopelessness with laughter, love,
and positive emotion
I'll look forward to my flight, already
booked, and try not to yearn.
The numbers may be daunting, but that's
not exactly a new notion.

'Cause if there's one thing that I've
learned about climate change,
It's that the numbers still just don't add up
Stretching numbers and facts creates
problems of unequal exchange
But despite certain doom approaching, I
just can't quite give up.

"How to Weigh a Plane in the Modern
Day" reflects my mixed-up thoughts
and muddled reasoning quite accurately,
which is what I hoped to portray. The two
articles by Bill McKibben had quite the
effect on how I viewed climate change

and making sense of the numbers spoke
to me on this personal issue. The articles,
Global Warming's Terrifying New Math
(2012) and *Recalculating Climate Math*
(2016), both addressed climate change
with a sense of urgency, while keeping the
reader grounded with a scale to refer back
to. I wanted to emulate this idea with my
spoken word poem, giving my own set of
numbers.

Overall, I am grateful for the chance to
express my own thoughts about climate
change and understand myself further.
As my goal is to teach in the classroom,
we need to be able to discuss climate
change from an informed perspective,
and we also need to take time to process
how we feel when we learn about climate
change. Asking questions, searching
out for answers, and continuing to push
forward to a better future are some of the
best ways that we can individually make a
difference in climate change.

References

- McKibben, B. (2012). *Global warming's terrifying new math*. Rolling Stone. Retrieved from <https://www.rollingstone.com/politics/politics-news/global-warmings-terrifying-new-math-188550/>
- McKibben, B. (2016). *Recalculating the climate math*. The New Republic. Retrieved from <https://newrepublic.com/article/136987/recalculating-climate-math>

Hannah Winger is a student training to be a teacher, completing both a Bachelors in Outdoor Recreation and a Bachelors of Education at Lakehead University. Through her education, Winger has developed a belief that nature-based education is vital to allow youth to connect with our Earth and develop an informed view of the broad scope of climate change.

Forty-Nine-Point-Six-Degrees-Celsius

By Brandon Earl MacLeod

*"This will be talked about for centuries,"
they said.
They said what they said
without considering they might very
well be the
ones long-gone, wiped off the map.
The ones flattened
floated off to another dimension.
Within a flicker of the night sky sits
the world
they burned to a crisp,
defended by little more than that faint
cry
above underwater clenched fists.
June 30th, 2021:
Mother Mother Earth Mother
made up her mind and laid down the
law.*

*After sweating out the traditionally
cooler
landmass many humans called Canada
the air set fire to life as they knew it.
For Lytton, a village cradled by river
and highway,
squeezed into
Nlaka'pamux
traditional territory,
it hit 46.6 Sunday,
47.9 Monday,
and climbed to that barely northern but
soul-melting temperature
of Forty-Nine-Point-Six-Degrees-Celsius
throughout an otherwise quite eventful
awful Tuesday afternoon
Terrible news - the town burned, too.
death
So did the planet
Here, they're telling us
we'll be talking about it for centuries,
as if that matters.
The day they lit the fire,
was the same day they started
paying the messenger.
Lighting the way
beyond the dodecahedron,
time melts twelve points into one.
Following trails of ever-ongoing
heat waves and bleak new horizons.*



*They say hope floats
They say hope floats
in the flickers of the night sky,
providing visions past time
and space.
Buried deep inside,
traversing your eyes,
beyond your soul
With hope.*

Set in both the future and the present, this piece looks at the effects of climate change, the origin of the ongoing 'fire', the heat waves and burning of Lytton (2021), willful ignorance, and our desire to but inability to act effectively before 'they' burn the world 'to a crisp'. The skies, those flickers of light in the night sky, initially signal despair and an 'end of the world', but eventually return to provide a glimmer of hope, regardless of where and when we are.



The piece is accompanied by three pieces of photographic art from my personal collection. The first represents an eternal fire. The second is a visual representation of our collective uncertainty and, worse, denial. The last photo is of hope in the darkness—so dark, but the longer you look, the more light begins to appear.

References

- CBC/Radio Canada. (2021, June 30). *For 3rd Straight Day, B.C. Village smashes record for highest Canadian temperature at 49.6 C | CBC news*. CBCnews. Retrieved from <https://www.cbc.ca/news/canada/british-columbia/bc-alberta-heat-wave-heat-dome-temperature-records-1.6084203>
- CBC/Radio Canada. (2021, July 3). *'Most homes' in Lytton, B.C., destroyed by catastrophic fire, minister says | CBC News*. CBCnews. Retrieved from <https://www.cbc.ca/news/canada/british-columbia/bc-wildfires-lytton-july-1-2021-1.6087311>



Duncan, S. (2021, June 30). *I didn't think it was possible, not in my lifetime anyway. +49.6°C in Canada that is 121°F! This is the story of the Canadian heat record that was crushed on 3 consecutive days by an unfathomable margin of +4.6°C (+8°F). This moment will be talked about for centuries*. Twitter. Retrieved April 14, 2022, from <https://twitter.com/ScottDuncanWX/status/1410097020912742404>

Brandon Earl MacLeod is a poet, educator, and father set to complete his BEd at Lakehead University in spring 2023. His artwork considers the worlds around and within us, connecting visual arts with the written word.

There is No Vaccine for Climate Change: The Need for Financial Activism

By Jill Bressmer

Personally, I have felt a bit hopeless knowing that my individual efforts to mitigate climate change will not be enough to slow down global warming. No matter how much I try to shrink my carbon footprint through lifestyle changes, it is increasingly clear to me that these small efforts will not make a huge dent in the overall health of the Earth. I interpret the statement that ‘there is no vaccine for climate change’ as saying that there is no one quick fix to heal our planet. Advances to mitigate and adapt to climate change require a holistic approach that is multi-pronged and combines individual and collective efforts. Addressing climate change effectively will require pathways which address systemic inequalities and provide support to marginalized groups.

The biggest takeaway that I have here, has been my growing understanding that where I choose to place my money as an investor has the potential to make a bigger change and have a larger impact than my personal habits. While my financial portfolio is small, where I choose to invest my money has the opportunity to generate much larger overall reverberations. I believe that once we learn that it is not just our day-to-day actions that have an impact on climate change, but how we choose to allocate our assets, we can create positive change and spark revolution.

The connections between financial systems, the global climate crisis, and my individual power to choose where I invest my own money is a topic that I am deepening my understanding with. However, I have quickly realized that while I have control over how I invest money (for example, within a self-directed RRSP, mutual fund or TFSA), as an Ontario educator I also must contribute to the Ontario Teachers Pension Plan (OTPP).

The OTPP is one of the ‘Big 10’ pension plans in Canada (Stewart, 2020). As an employee of a public school, I do not get to decide when or if I want to contribute to the OTPP. While the OTPP must make investment decisions in the best interests of plan beneficiaries (to act prudently and maximize returns), they also make investment decisions largely free from outside influence and are not required to adopt investment strategies that support Canada’s transition to low-emissions (Stewart, 2020). As a beneficiary, I have no control over how my contributions are invested. I am unable to increase my contributions to show my support of the fund or decrease contributions if I feel as though the fund should do more to divest high carbon investments and re-invest in sustainability, renewable energy and technologies.

Stewart’s (2020) inquiry examining Canada’s Big 10 pension funds explains the Expert Panel on Sustainable Finance’s (EPSF) two recommendations made to the Big 10: 1) implement the disclosure recommendations of the Task Force on Climate-Related Financial Disclosures; and 2) clarify the relevance of climate change that pension funds owe to their beneficiaries. However, Stewart (2020) strongly suggests that these recommendations will not guarantee that the Big 10 will meaningfully contribute capital to support a climate-resilient economy. This is largely due to the independent governance structures of these pension funds which prevent beneficiaries, civil society, and the courts from holding the funds accountable. In other words, because investment decisions are made without influence from plan sponsors, administrators or the government, and without shareholders to answer to, the Big 10 would only have to consider low-carbon investments as part of their investment decision-making. Due

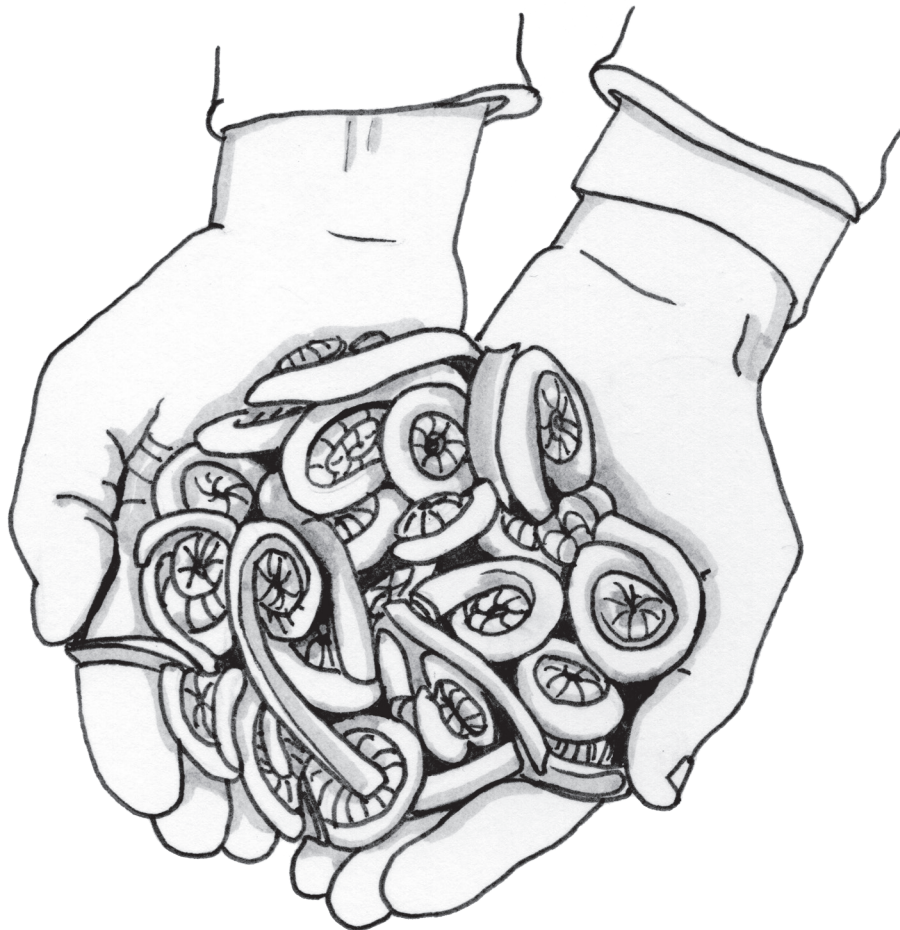
to this, they are unlikely to face internal pressure to improve their disclosure or develop low-carbon investment targets (Stewart, 2020). Furthermore, Stewart (2020) notes that the Big 10's exit from high emission investments will not bankrupt the fossil fuel industry, nor is it likely to incentivize fossil fuel companies to adopt more carbon-friendly practices. Today, investment in fossil fuel accounts for an estimated 4-9% of the Big 10's equity holdings (Stewart, 2020).

So, what do we do? Critical examination of governance structures coupled with strong legislation, robust policy and enforcement can help support Big 10 pension funds by, for example, requiring that a portion of divested funds be re-invested in low-carbon alternatives (Stewart, 2020).

References

Stewart, B. D. (2020). Business as usual?: The limited influence of climate change disclosure and fiduciary duties on the low-carbon investment practices of Canada's big 10 public pension funds. *Journal of Environmental Law and Practice*, 33(2), 93-132.

Jill Bressmer (MEd) is a mother, musician, artist, rescue SCUBA diver, small business owner, world traveler, educator, and lifelong learner. Jill's teaching practice and pedagogy reflects her interest in equity studies and developing critical thinking skills in her students through the examination of the relationship between environmental and social justice issues.



Lovers, Dreamers, and Drums – A Protest Song

By Cole Griffin Davison

Capo 5

Verses: G C (repeat every line)

Chorus: G C Am (G)

Verse 1:

I see a future for our kind
I see people waking up from the lies
I see hope I see despair
But more and more than ever now I see
people that care

Chorus:

Yeah we got the lovers and the dreamers
and the drums
They got the money and the power and
the guns but
We got the future on our side
We got the people and the passion and the
purpose
Let's raise our voices let's make em
nervous
Let em know we won't be denied

Verse 2:

They say my head's up in the clouds
They say I say too much, and I say it too
loud
Whenever we stand up, they tell us to sit
down
But as long as there's earth left to hold us
up, we're going to stand our ground

Chorus

Verse 3:

They'll try to split us into groups
They'll try to tell us what is fact is not
what's truth
They'll try to tell this is middle versus
poor
But really it's the ones who hold the guns
versus the ones who dream of more

Chorus

I set out to write a song that would resonate with the complex and at times contradictory feelings that people experience when reflecting on the state of our planet. Reading about, watching, or even talking to people directly impacted by radical shifts in climate can fill people with a deep sense of righteous dread, and yet this generation of activists seems to be defined by the unimaginable amount of hope that they can generate through solidarity and love.

The stronger that we become, the more people join in our chorus for immediate change, and the louder our demand becomes. We need this volume, because as Fredrick Douglass once said, "Power concedes nothing without a demand. It never did and it never will." But when our demand becomes loud enough to matter, those who derive power from a dying planet will roll out an ever growing script of lies, distractions, and wickedness in order to weaken our resolve. They want us to be disheartened, to doubt a better future, to unravel our trust in each other, but as Ralph Chaplin wrote in his historic song *Solidarity Forever*, "In our hands is placed a power greater than their hoarded gold." That power of solidarity and love inspired this song of hope. The lyrics have been kept focused on the struggle of unheard groups, so the song is not limited to its use in climate marches. The song has been performed primarily at climate rallies, but its versatility has allowed for other uses.

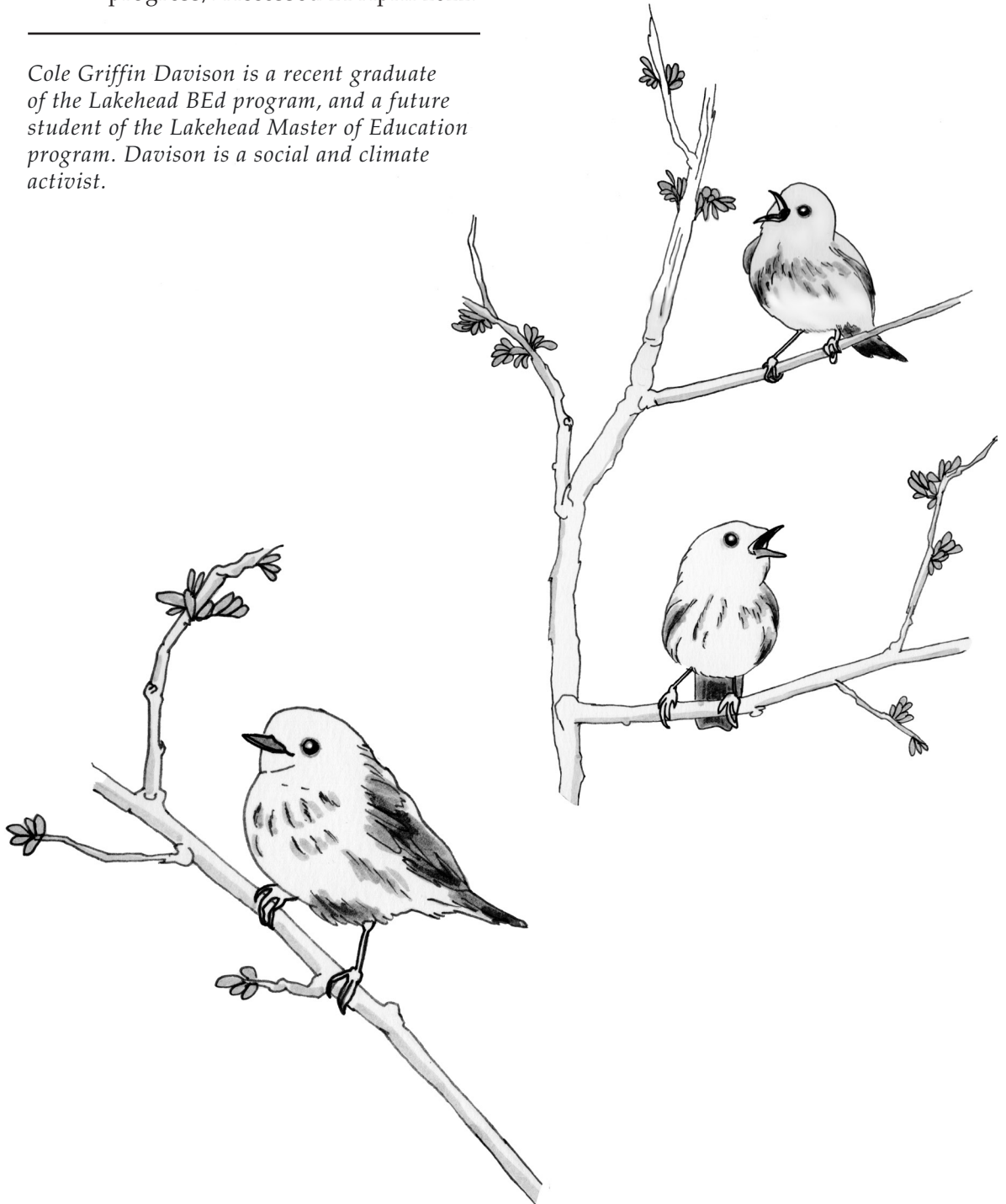
Access song here: <https://youtu.be/KpaOUdtCToY>

References

Chaplin, Ralph Hosea. *Solidarity Forever*. Industrial Workers of the World. iww.org, https://archive.iww.org/history/icons/solidarity_forever/. Accessed 24 April 2022.

Douglass, Frederick Augustus Washington Bailey. (1857) *Frederick Douglass, If there is no struggle, there is no progress*. Blackpast, BlackPast, 25 January 2007, <https://www.blackpast.org/african-american-history/1857-frederick-douglass-if-there-no-struggle-there-no-progress/>. Accessed 24 April 2022.

Cole Griffin Davison is a recent graduate of the Lakehead BEd program, and a future student of the Lakehead Master of Education program. Davison is a social and climate activist.



An Aspiring Teacher's Climate Manifesto

By Hudaibia Naseem

1 I have to remain in a continual state of love and solidarity.

"Love requires that we offer ourselves without worries of reciprocity or mutuality", (Abu-Jamal & Hill, 2012) and I believe that every being that benefits from the land is inevitably indebted to it. Recognizing the dire consequences of climate change is a grievous process that demands grassroots activism as it paves the road to healing both the planet and our relationship to it. I must ground myself in the tradition of radical love or *armed love* as posed by Paulo Freire, "the fighting love of those convinced of the right and the duty to fight—with a revolutionary, radical essence, conceiving love as an act of freedom that becomes the pretext for other actions towards emancipation." (Martinez, Rezvi, Shirude & Yeh, 2021)

5 I must never lose sight of the consequences of '2 degrees' warmer

2-degree still means 150 million deaths from air pollution. It means once-in-a-century storms hitting every single year. It would make hundreds of millions of climate-refugees. (Wallace-Wells, 2019) In wet-bulb temperatures, equatorial nations will cease to exist and we are already more than halfway to the 2.7-degree mark. For island nations 2-degree increase is genocide. (Escalante & O'Shea, 2021, 11:55) Question a system that refuses to take action in the face of such alarming data, a system that has scientist's concluding that our road to prevent the climate from warming more than 2.7 degrees while possible is "politically unlikely". (Davenport, 2017)

2 I will not allow myself to feel small.

You might be tempted to ask, 'how is me using a reusable water bottle going to fix climate change?', 'so what if I buy this thing?'. In the process of inquiry and resistance to the current culture of consumption, and unmonitored extravagance and excess (food and material) you undergo **psychological re-orientation**. (Escalante & O'Shea, 2021, 28:25) You do this by facing your own participation in our hyper consumerist world, by **questioning** what you are willing to give up, by working on yourself—a more disciplined, thoughtful, engaged version of you—which then positions you to challenge capitalist structures in other ways. (Escalante & O'Shea, 2021, 37:42) "The only real revolution happens right inside of you." (Cole, 2017, 3:23)

6 I must believe in the power of the collective.

Dismantle the idea that emancipation lies in the hands of a select few. Refuse to be hopeless, resist the urge to sit back, because no system is absolute. Spark conversations, vocalize concern and create awareness. Alone, we cannot change the world but we can organize locally in our small paces and if we all do this, when we add the sum of all parts we get the whole. We can only be hopeful to a certain extent of time before survival becomes the only motive for our brothers and sisters on the receiving end of the catastrophe brought on by the global north. The longer we wait to act, the intensity of the intervention we'll need to overthrow systems will also become higher. (Escalante & O'Shea, 2021, 11:13)

3 I will not be stagnant. Be the helper. We need to communally take care of each other.

We need to take a collective, dialectical approach. The idea that 'we can deal with the consequences when we get there' is entirely ignorant, impulsive and rooted deeply in fascist tendencies as it yields to economic powerhouses to keep exploiting and corrupting the atmosphere at the cost of the planet and innocent human lives. So how and where do we find hope? Both the climate movement and psychology answers: **WITHIN YOURSELF**. Be restless, be alive. We are all gifted with talents and ways that can help others.

7 I must remain in an ongoing process of critical consciousness.

My education requires a critical evaluation of my own biases, belief systems, and inherited or internalized worldviews. Without a sound spiritual awareness of myself, I cannot be honest with my students. bell hooks argues, "empowerment cannot happen if we refuse to be vulnerable". (hooks, 1994) I must create open classrooms where my own fear of vulnerability doesn't hold my students back from opportunities to speak up, engage, and interact with critical issues. My work must be rooted in the needs of students and the community to further the work of activist teaching. "Research has suggested that critical consciousness—the ability to recognize and analyze systems of inequality and the commitment to take action against these systems can be a gateway to academic motivation and achievement for marginalized students". (El-Amin et al, 2017)

4 I will always tune into the gravity of the situation. Stay informed.

Recognize the dystopia created by and before the aftermath of global warming. Recognize the moments when denialism annihilates the rights of the land: political despotism, conservative estimations in the reporting of data, lack of media attention, and misinformation. The moments that drive attention away from the erasure of coastlines with people! The extinction of sea life! The heat waves that will kill people! The capitalist system that will profit over those very disasters and survive in the midst of global extinction. (Escalante & O'Shea, 2021, 26:32)

8 I must teach to empower.

As an aspiring teacher, I will equip students with tools that help them arrive at their own conclusions of the current relationship between humans and the planet and what our responsibilities are to this land, to people and to the future. I carry the responsibility of informing the leaders of tomorrow the kind of legacy they are inheriting so that they can make informed and well-meaning decisions. Youth have powerful voices and in the moments that we engage them to pose solutions that will fight climate change locally, we empower them to carry those values with them everywhere they go and in becoming resilient forces that fight against eco-destruction.

AN Aspiring Teachers Climate Manifesto

When I thought about what I wanted to create for my culminating project for Climate Change Education, I promised myself that I wanted it to be real, something tangible that will help me grow. I was thinking of ways to compile all the information I have learned and I thought of creating a tool kit. This manifesto is something I can come back to and re-read to re-spark how I feel in this very moment after having read and researched so in depth. If I had to describe the backdrop of my piece, the state of mind that willed my project into existence, it was Breht O'Shea and Alyson Escalante's candid breakdown of the 2021 I.P.C.C report exposing the urgency of the actions required to challenge our current systems and the work needed to be done on the individual and communal level to put an end to a reigning regime of powerhouses that refuse to acknowledge the devastating and everlasting consequences of their actions. Words that broke my pensive state of being and pushed me to write were those of O'Hagan who concludes her article on climate grief with:

"The truth is, how we react to climate change is still up for grabs. How bad it gets and the kind of world we build from it is our decision to make. We shouldn't suppress climate grief, but expand it out and use it as a gateway to action. Hope is the axe you break down doors with in an emergency. But first you need to recognise that the house is on fire" (2019).

References

- Abu-Jamal, M., Hill, M.L. (2012). *The classroom and the cell: Conversations on Black life in America*. Third World Press.
- Davenport, Coral. Major climate report describes a strong risk of crisis as 2040. (2018). *The New York Times*. <https://www.nytimes.com/2018/10/07/climate/ipcc-climate-report-2040.html>



- El-Amin, A., Seider, S., Graves, D., Tamerat, J., Clark, S., Soutter, M., & Johannsen, J., Malhotra, S. (2017). Critical consciousness: A key to student achievement. *Phi Delta Kappan* 98(5), 18-23.
- Escalante, A & O'Shea, B. (Hosts). (2021). "Code Red" for humanity: The IPCC report 2021 [Audio podcast episode]. In *Revolutionary Left Radio*. <https://open.spotify.com/episode/03j90eieXqJ5JTRqTxJTzK?si=5CFowquyRiuvpcUmDoWNYg>
- hooks, b. (1994) *Teaching to Transgress*. Routledge.
- Martinez, R., Rezvi, S., Shirude, S., & Yeh, C., (2021). Radical love as praxis: Ethnic studies and teaching mathematics for collective liberation. *Journal of Urban Mathematics Education* 14(1), 71-95.
- O'Hagan, E.M. 'Climate grief' is real and I've got it bad. (2019). *Vice*. <https://www.vice.com/en/article/gy48d4/environmental-grief-climate-change-anxiety>
- Wallace-Wells, David. (2019). *The uninhabitable earth*. Penguin Books.

Hudaibia Naseem is a student currently completing her BEd. Her teaching journey has inspired her to ground her pedagogy in culturally relevant and purposeful teaching that engages students in critical thinking practices through context heavy and meaning-making learning.

Snow Sculptures

By Paul Berger



Each winter, I take my Climate Change Education classes outside to make snow sculptures meant to send messages about climate change. The day before, I snowshoe various patches so we can cut snow blocks from them. In groups, students discuss what they want to create and quickly go to work. I've seen creations ranging from a polluting factory to 'electric' vehicles, dollar signs and polar bears. I wrote "no walls" on this wall (right photo) in reference to how open Canada must be to climate refugees. One group made this scene they called "sitting on the fence" (top photo) and said, "If no one decides to do anything and make a change then eventually none of us are going to have a choice anymore." The sculptures remain for passersby to see and think about. For students, it's a gentle way to be involved in climate communication or activism—and it gets us outside of the classroom walls!



Paul Berger is a climate change activist and associate professor in the Faculty of Education at Lakehead University.

Keeping the Earth Warm: Life Giving vs Life Threatening

By Courtney Strutt

Adapted Ecological Macro Model from Tom Puk's Ecological Consciousness: Stop Peeing into the Drinking Water (2017).

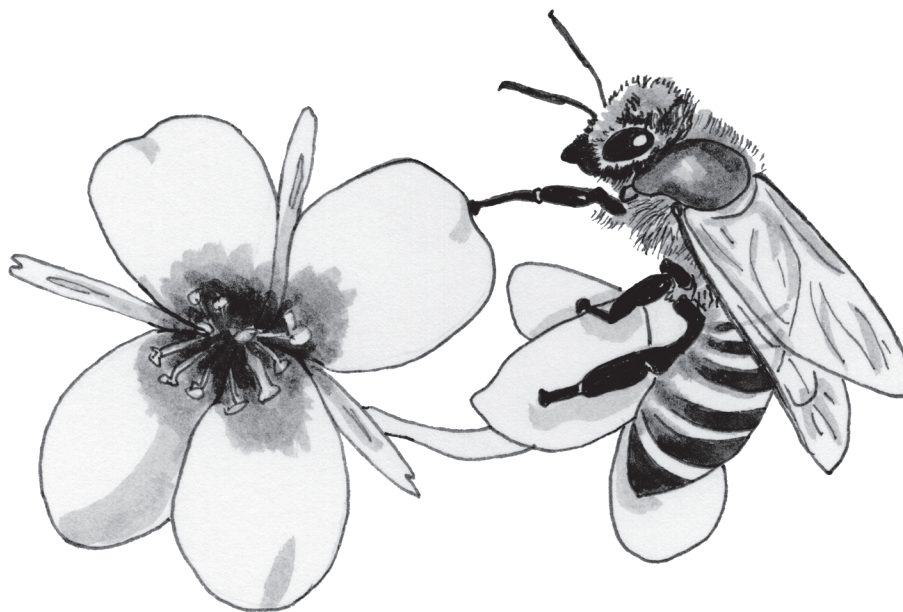
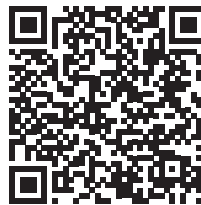
This activity was designed to learn about the natural greenhouse effect through an active, embodied simulation. It requires a large open space for students to be actively running around. Each student represents either water vapour, carbon dioxide, a greenhouse gas or a light/heat wave, embodying different roles and experiencing the natural, life-giving wonder of the greenhouse effect.

This activity is followed by a debrief and discussion to help students consolidate their understanding of this natural process. Following the discussion, students will enact a different simulation: the anthropogenic greenhouse effect that is currently exacerbating climate

change. Changing the ratios of molecules to represent the current state of the atmosphere should drastically change the outcome of the game. These differences should be discussed and used to motivate a "what now" discussion with your students.

To access the activity go here: <https://drive.google.com/file/d/1RE3eU0MuOmP5M1HPmNuXplCjPAzi5JL9/view?usp=sharing>

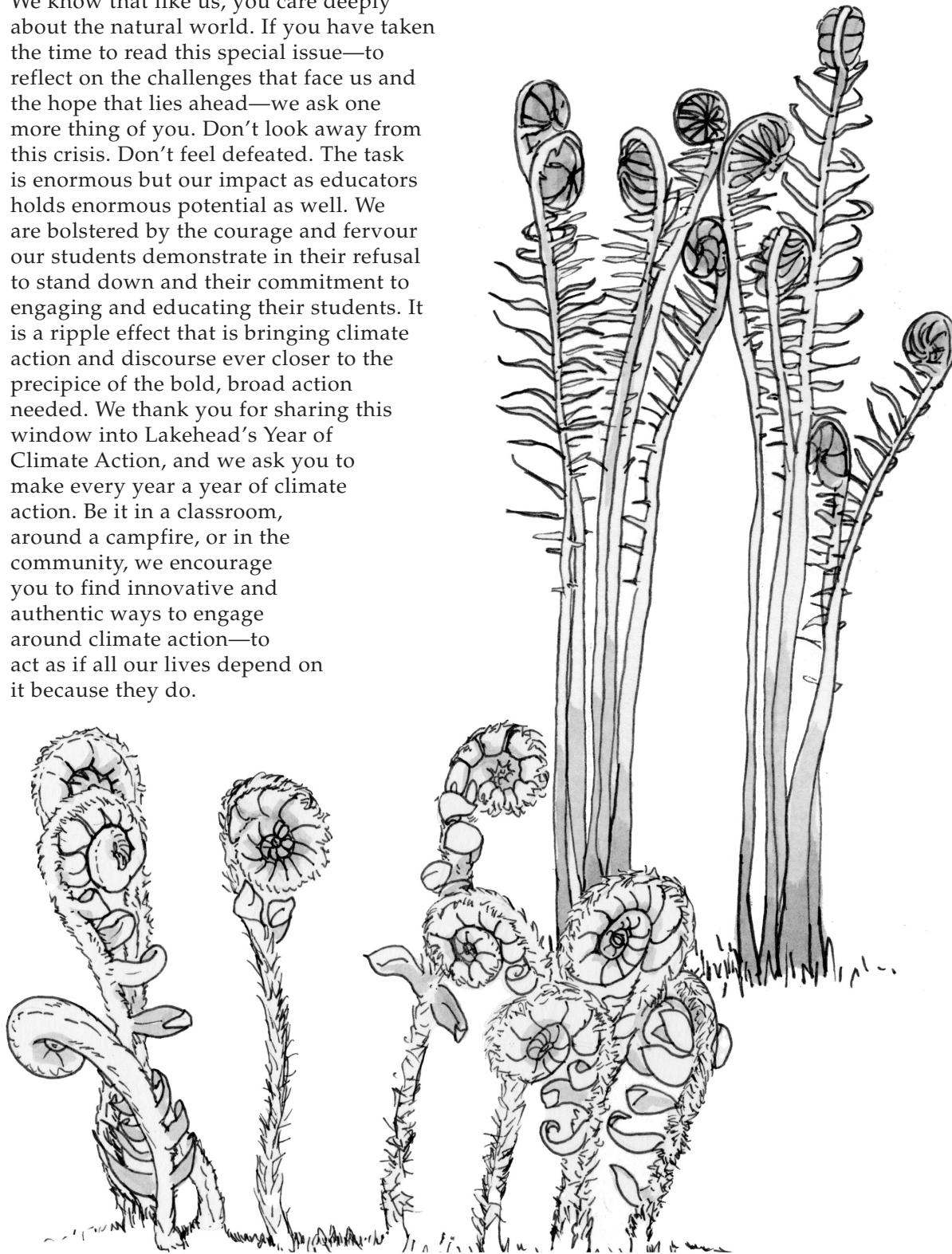
Courtney Strutt is a white settler educator and community development practitioner based out of Thunder Bay, Ontario. Using a lens of decolonization and social justice, Courtney's work spans from municipal emergency food system response planning and supporting local Indigenous food sovereignty movements to addressing climate change through teaching and municipal policy making.



A Final Note

By Ellen Field, Devon Lee, Olivia Hunt, Sara Layton, Craig Barclay and Paul Berger

We know that like us, you care deeply about the natural world. If you have taken the time to read this special issue—to reflect on the challenges that face us and the hope that lies ahead—we ask one more thing of you. Don't look away from this crisis. Don't feel defeated. The task is enormous but our impact as educators holds enormous potential as well. We are bolstered by the courage and fervour our students demonstrate in their refusal to stand down and their commitment to engaging and educating their students. It is a ripple effect that is bringing climate action and discourse ever closer to the precipice of the bold, broad action needed. We thank you for sharing this window into Lakehead's Year of Climate Action, and we ask you to make every year a year of climate action. Be it in a classroom, around a campfire, or in the community, we encourage you to find innovative and authentic ways to engage around climate action—to act as if all our lives depend on it because they do.



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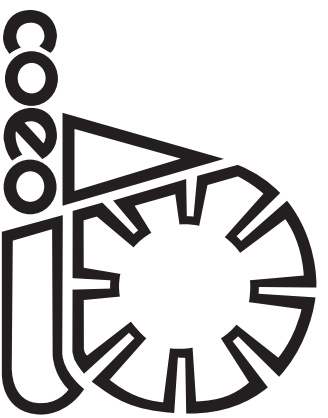
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