



EECOM 2019

ACTION ON CLIMATE CHANGE THROUGH EDUCATION

May 10-12, 2019

University of Saskatchewan, Saskatoon

FULL CONFERENCE PROGRAM



#ecom2019



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Most pre-conferences
and Project WET

Prairie Habitat Garden

East Doors

Start here for
EECOM Picnic Social,
Five Senses Mindfulness Walk
& Bird Walk

Nutrients for
Life

Main Conference

Arts

Yoga

Lunch &
Posters

Exhibit Fair

Louis'

Residences

Map Legend

- Buildings
- Underground Pedestrian Tunnel

- ⊙ Saskatoon Transit
- ⊙ Royal University Hospital
- ⊙ Wayfinding Maps
- ⊙ Information Centres

Place Not Student Centre - 966-9598
 Parking Services - 966-4502
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Campus Safety available 24 hrs 966-9595

www.usask.ca/maps

Public Parking Lots

- Pay Parking Lots (1, 4, 6)
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- Stadium Parkade (2)
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FOR INFORMATION ABOUT THE EXHIBIT FAIR, VISIT Eecom.org/Eecom-2019/EXHIBIT-FAIR.



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Conference Hashtag



#EECOM2019 [PRE-CONFERENCE SCHEDULE](#)

More details!

Link to conference map

Wifi: uofs-guest
Username: eecom2019
Password: climateaction

TIME	PRE-CONFERENCE	ROOM & BUILDING
WEDNESDAY, MAY 8		
May 8-9	Boreal Forest Eco-Tour	Bus Pick Up at University of Saskatchewan Education Building - East Doors
THURSDAY, MAY 9		
9am-12pm	EECOM Board Meeting	By Invitation Only
9am-1pm	Mapping out a Strategic Path to Advance Ocean Literacy in Canadian Classrooms and Communities	Room 3133, Education Building
10am-12pm	Sustainability Education Policy Forum	Room 2010, Education Building
12pm-4pm	Project WET Canada 2019-2021 Implementation Strategy Workshop	Room 1020, Education Building
12pm-5pm	Helping Environmental Education Associations Build their Capacity – An EECOM Leadership Summit	Room 2002, Education Building
1pm-2:30pm	University of Saskatchewan Campus Sustainability Walking Tour	University Services Building Entrance
1pm-4pm	Relational Healing, Climate Change, and Indigenous Land-based Learning	Tipi in The Bowl
2:30-6:30pm	CONFERENCE REGISTRATION	Upper Place Riel
4:30pm	EECOM PICNIC SOCIAL	Firepits by Diefenbaker Canada Centre
6:00pm-10:00pm	Brewing Beer Naturally	9 Mile Legacy Brewing, 229 20th Street West

Note: schedule is subject to change as activities are confirmed. Last Updated May 6, 2019

#EECOM2019 CONFERENCE

DETAILED SCHEDULE OF CONCURRENT SESSIONS & WORKSHOPS

Full Program

Note: schedule is subject to change as activities are confirmed. Last Updated May 6, 2019

Tech things!
Wifi: uofs-guest
 Username: eecom2019
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**** View livestream on eecom.org/eecom-2019**

LEGEND

- Workshops
- Panel Presentations
- Posters & Special Events
- Keynote
- Exhibit Fair
- Field Trips

← Click!

- ★ Climate Change Ed
- Indigenous Ed
- PreK-12 Ed
- Higher Ed
- Community Ed

THURSDAY, MAY 9								
8:30am	EECOM 2019 PRE-CONFERENCE (MEETING LOCATIONS - GO DIRECTLY TO MEETING LOCATIONS & SIGN IN WITH FACILITATOR)							
2:30-6:30pm	CONFERENCE REGISTRATION IN UPPER PLACE RIEL (CONFERENCE MAP) ← <i>Very helpful!</i>							
4:30pm	EECOM PICNIC SOCIAL (FIREPITS BY DIEFENBAKER CANADA CENTRE ON THE UoFS CAMPUS)							
FRIDAY, MAY 10								
								GOLDEN EAGLE SPONSOR: UNIVERSITY OF SASKATCHEWAN ENVIRONMENTAL PROGRAMS
7:00-8:00am	EXHIBITOR SET UP IN UPPER PLACE RIEL (INFORMATION FOR EXHIBITORS)							
7:00-9:00am	REGISTRATION WITH COFFEE IN UPPER PLACE RIEL							
8:00am-1:30pm	EXHIBIT FAIR IN UPPER PLACE RIEL							
8:30-10:15am	** OPENING CEREMONY, RECOGNITION OF TERRITORY, & TIM SWINEHART KEYNOTE ADDRESS: TEACHING FOR CLIMATE JUSTICE AND STUDENT ACTION - NEATBY-TIMLIN THEATRE, ARTS 241							
Concurrent Session # 1 10:30-11:30am	Climate Change Education and Student Leadership <i>Practicing Climate Actions: A Practice Perspective on Climate Change Education</i> Kristen Hargis (by videoconference) <i>Off the Grid: Students take the lead on Climate Justice</i> Dianne Miller (Chair), Michael Prebble, & Jocelyn Dupuis Room: Arts 263 ★ ●	Teaching Adaptation & Mitigation: Interdisciplinary Climate Change Workshop for Teachers Adam Young & Adam Greenberg Room: Tipi, The Bowl ↶ <i>Room Numbers!</i> ★ ●	"Rising Tides" - Trends in Canadian Ocean Literacy Anne Stewart, Sarah MacNeil, Danika Strecko, & Shane Patey Room: Arts 202 ★ ●	Student Action for a Sustainable Future Pam Belcher (Chair), Angie Bugg, Sam Gunn, with representatives from Greater Saskatoon Public Schools and the City of Saskatoon Room: Arts 210 ★ ●	Debriefing Safe Space EECOM Board Members Room: Arts 201 ★ ● ● ● ●	Climate Action in Eco-Certified Schools <i>#ClimateAction in EcoSchools</i> Lindsay Bunce (Chair) <i>Small School: Big Ideas- "Simply Living Simply"</i> Terri Munn (by videoconference) Room: Arts 212 ★ ●	One House Many Nations: Hacking Colonial Systems of Dominance Alex Wilson Room: Arts 214 ●	Innovative Approaches to Sustainability in Higher Education <i>Using a Hackathon to Engage Students in Environmental Problem-solving</i> Elizabeth Kuley, Shelley Neufeld, Noreen Predicala, & Matt Wolsfeld <i>Designing Change for a Living Planet: Student Leadership on Campus</i> Kathy Nguyen (Chair) Room: Arts 213 ●
11:30am-1:00pm	LUNCH & POSTER SESSION IN GARRY ROOM, MARQUIS HALL							
12:00-1:00pm	FIVE SENSES MINDFULNESS WALK WITH BARRET MILLER (MEET AT PARKING LOT NORTH OF DIEFENBAKER CANADA CENTRE ON THE UoFS CAMPUS)							
1:00-5:30pm	FIELD TRIPS (MEETING LOCATIONS)							
7pm	OFFICIAL WELCOME RECEPTION & EECOM AWARDS CEREMONY WITH TROY HUDSON & BROKEN HORSE AT THE REMAI MODERN (INCLUDES GALLERY ADMISSION, 102 SPADINA CRESCENT EAST)							

LEGEND

Workshops	Panel Presentations	Posters & Special Events	Keynote	Exhibit Fair	Field Trips	← Click!	★ Climate Change Ed	● Indigenous Ed	● PreK-12 Ed	● Higher Ed	● Community Ed
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SATURDAY, MAY 11		GOLDEN EAGLE SPONSOR: UNIVERSITY OF SASKATCHEWAN									
7:00-8:00am	RISE & SHINE YOGA WITH HOT YOGA ON 20TH IN THE BOWL										
8:00-8:30am	REGISTRATION WITH COFFEE IN UPPER PLACE RIEL (COFFEE ALSO AVAILABLE OUTSIDE NEATBY-TIMLIN THEATRE)										
8:00am-6:00pm	EXHIBIT FAIR IN UPPER PLACE RIEL										
8:30-9:15am	** SHEELAH McLEAN & SYLVIA McADAM KEYNOTE ADDRESS : IDLE NO MORE: The Next Generation IN NEATBY-TIMLIN THEATRE, ARTS 241										
9:15-10:15am	OFFICIAL EXHIBIT FAIR & NETWORKING SPACE OPENING IN UPPER PLACE RIEL										
<p>Concurrent Session # 2</p> <p>10:30-11:30am</p>	<p>Youth Climate Action: Engaging and Empowering Youth in Community Jennifer Williams</p> <p>Room: Arts 263</p> <p>★ ●</p>	<p>Talking Dirty About Climate Change: 4R Nutrient Stewardship Mitchell Timmerman, Bob Adamson, Ray Cochrane, & Kent Lewarne</p> <p>Room: Parking Lot G</p> <p>★ ●</p>	<p>Municipal Climate Action Leadership</p> <p><i>Local Actions: The City of Saskatoon's Climate Change Adaptation Strategy</i> Kristin Bruce (Chair)</p> <p><i>The City of Saskatoon's Low Emissions Community Plan Update</i> Hilary Carlson</p> <p>Room: Arts 202</p> <p>★ ●</p>	<p>Cross-curricular Approaches to Environmental Education</p> <p><i>Evaluating Cross-Curricular Environmental Education</i> Devin Radcliffe (Chair)</p> <p><i>How Climate Relates to All Aspects of Science Curriculum</i> Tim Stephenson</p> <p>Room: Arts 210</p> <p>★ ●</p>	<p>Project WET Canada's NEW 'French Projet WET, Module 1' and 'Getting Little Feet Wet' Combined Workshop Lizabeth Nicholls, Reid Dingwall, Marcia Klein, & Maxine Koskie</p> <p>Room: Education Building 1020</p> <p>🔴 Take Note!</p> <p>●</p>	<p>Teaching and Learning Approaches to Outdoor and Climate Education</p> <p><i>Nature Buddies: Students Leading Students in a Nature Inquiry</i> Alison Ellwood (Chair)</p> <p><i>What Happens when Learning Goes Outside?</i> Chris Clark</p> <p>Room: Arts 212</p> <p>●</p>	<p>Connect, Educate, Inspire: Place-based Education Leading to Climate Action Jaclyn Angotti</p> <p>Room: Arts 214</p> <p>★ ●</p>	<p>Developing Sustainability Leadership Skills in Post-secondary Students</p> <p><i>Graduating Post-secondary Students with Skills to Lead in Sustainability</i> Kathy Nguyen & Sarah Winterton</p> <p><i>The Educação do Campo in Brazil: Practices and Challenges for Environmental and Science Education</i> Marcelo Borges (Chair)</p> <p><i>Gamifying Sustainability Education and Eco-literacy in Schools</i> Alayna Chan, Sarah Johnston, & Jasmin Parker</p> <p>Room: Arts 213</p> <p>★ ● ●</p>			
11:30am-1:00pm	LUNCH IN GARRY ROOM, MARQUIS HALL										
11:30am-1:00pm	EECOM AGM IN MONTCALM ROOM, MARQUIS HALL (PICK UP LUNCH IN GARRY ROOM)										
1:00-1:45pm	ERIEL DERANGER KEYNOTE ADDRESS - NEATBY-TIMLIN THEATRE, ARTS 241										

LEGEND

Workshops	Panel Presentations	Posters & Special Events	Keynote	Exhibit Fair	Field Trips	← Click!
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★ Climate Change Ed	● Indigenous Ed	● PreK-12 Ed	● Higher Ed	● Community Ed
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SATURDAY, MAY 11 CONTINUED						GOLDEN EAGLE SPONSOR: UNIVERSITY OF SASKATCHEWAN		
<p>Concurrent Session # 3</p> <p>2:00-3:00pm</p>	<p>** Climate Change Communication and Education</p> <p><i>Storytelling: A Tool for Exploring Climate Change Engagement in Saskatchewan</i> Rachel Malena-Chan (by videoconference)</p> <p><i>Having the Difficult Conversation: Climate Change is Real</i> Palash Sanyal</p> <p><i>Methodologies as Movies, Narrative Environmental Journalism as Sweet as Prose</i> John Currie</p> <p>Paul Orłowski (Chair)</p> <p>Room: Arts 263</p> <p>★ ●</p>	<p>Engaging Municipalities in Climate Action</p> <p><i>National Climate League: Playing with Ideas like Playing with Pucks</i> Margret Asmuss (Chair)</p> <p><i>GHG is a Municipal Issue: Engaging Community and Advising Administration</i> Kathryn Palmer, Brian Sawatzky, Sara Harrison, Erin Akins, Sydney Boulton, Angie Bugg, Kari Engele-Carter, Aditi Garg, Sarina Gersher, Kira Judge, Andrea Lafon, & David McGrane</p> <p>Room: Arts 202</p> <p>★ ●</p>	<p>Building Capacity for Environmental Education in North America Sarah Bodor</p> <p>Room: Arts 210</p> <p>●</p>	<p>Bring the Ocean to School on Monday without Getting Wet Monika Pelz</p> <p>Room: Arts 206</p> <p>●</p>	<p>Comparative Analyses of Sustainability and Climate Change Education Approaches</p> <p><i>Reorienting Education to Improve the Lives of Indigenous Peoples</i> Charles Hopkins & Katrin Kohl (Chair)</p> <p><i>Sink or Swim: Comparative Analysis of Local Climate Change Policies</i> Bradley Ward</p> <p><i>Canadian Climate Change Education Survey: Report on Findings</i> Ellen Field (by videoconference) & Paul Berger</p> <p>Room: Arts 212</p> <p>●</p>	<p>What is Excellent Climate Change Education? Gareth Thomson</p> <p>Room: Arts 214</p> <p>★ ●</p>	<p>Environmental and Sustainability Education Practices</p> <p><i>Early Childhood Environmental Education Practices</i> Keonie Green (Chair) & John Bosco Archaribasam</p> <p><i>Environmental and Sustainability Education in Teacher Education</i> Janet McVittie, Laura Sims, & Paul Elliot</p> <p>Room: Arts 213</p> <p>★ ● ●</p>	
3:00-3:15pm	SNACK BREAK							
<p>Concurrent Session # 4</p> <p>3:15-4:15pm</p>	<p>** Spurring Climate Action Through Narratives and Visualizations</p> <p><i>Carbon Reduction Wedges: Interactive Simulations and Narratives Catalyze Climate Action</i> Mckenzie Tilstra</p> <p><i>Low-Carbon Economy Stories of Saskatchewan</i> Margret Asmuss</p> <p><i>Climate Action Narratives: The Hopeful Story of Carbon Reduction Opportunities</i> Melanie Hoffman, Peter Mahaffy, & Mckenzie Tilstra</p> <p>Paul Orłowski (Chair)</p> <p>Room: Arts 263</p> <p>★ ●</p>	<p>Theory to Praxis of Climate Change in Indigenous Education Kevin Lewis (Chair), Matilda Lewis, Patricia Alexander, & Jody Houle</p> <p>Room: Tipi, The Bowl</p> <p>●</p>	<p>Sustainability Education from Religious Perspectives</p> <p><i>Radically Re-Reading and Re-Studying Biblical Texts in the Anthropocene</i> Cam Fraser (Chair)</p> <p><i>Returning to Eden: How Deconstructing Our Foundational Story Can Guide Us to a Sustainable Future</i> Josh Campbell & Philip Brass</p> <p>Room: Arts 202</p> <p>★ ●</p>	<p>Partnerships for Sustainability and Climate Education</p> <p><i>Ways that Ecomuseums Preserve Natural and Cultural Heritage Through Education</i> Anna Hall, Glenn Sutter, & Adela Kincaid</p> <p><i>Powerful Partnerships: Fighting Climate Change Together</i> Elizabeth Wren & Raysha Carmichael</p> <p><i>Teacher Partnerships in Environmental and Sustainability Education</i> Rachel Regier (Chair)</p> <p>Room: Arts 210</p> <p>★ ● ●</p>	<p>Water and Environmental Education</p> <p><i>Freshwater Climate Data Packages</i> Pauline Gerrard</p> <p><i>Dive In! Exploring Our Connection with the Ocean</i> Ann Eriksson</p> <p><i>Navigating Ocean Education on Dry Land</i> Danika Strecko (Chair) & Catriona Wilson</p> <p>Room: Arts 206</p> <p>★ ●</p>	<p>Research Approaches to Environmental Education</p> <p><i>Songwriting for Nature: Increasing Nature Connection and Well-Being through Music</i> Glenn Sutter & Katherine Arbutnott</p> <p><i>Posthumanist Pedagogies: Attuning-within a Transdisciplinary Environmental Education</i> Kathryn Riley (Chair) & Peta White (by videoconference)</p> <p>Room: Arts 212</p> <p>● ●</p>	<p>Emotions and Environmental Education Approaches</p> <p><i>Connecting Place-Based Community Focused Learning to Trauma</i> Nancy Barr</p> <p><i>Building Environmental Empathy with Character!</i> Kari Riddell & Amanda Ring</p> <p><i>Empathy or Apathy: Making High School Climate Education Matter</i> Kristen Simonson (Chair)</p> <p>Room: Arts 214</p> <p>★ ●</p>	<p>Higher Education and Sustainable Development around the World Stefanie Mallow</p> <p>Room: Arts 213</p> <p>●</p>

LEGEND

Workshops	Panel Presentations	Posters & Special Events	Keynote	Exhibit Fair	Field Trips	← Click!
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★ Climate Change Ed	● Indigenous Ed	● PreK-12 Ed	● Higher Ed	● Community Ed
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SATURDAY, MAY 11 CONTINUED						GOLDEN EAGLE SPONSOR: UNIVERSITY OF SASKATCHEWAN		
<p>Concurrent Session # 5</p> <p>4:30-5:30pm</p>	<p>** Fossil Fuels and Climate Action</p> <p><i>Adolescent Thinking Around Climate Change and Economic Uncertainty in BC</i> Paul Orłowski (Chair)</p> <p><i>Petro-Pedagogy: Fossil Fuel Interests and the Obstruction of Climate Justice</i> Emily Eaton & Nicholas Day</p> <p><i>Southeast Saskatchewan Oilfield Workers' Views on Climate Change</i> Shelby Adams</p> <p>Room: Arts 263</p> <p>★ ●</p>	<p>Decolonization, Empowerment, and Learning Through Community Gardens</p> <p><i>Decolonization, Reconciliation, Immigrant Women's Empowerment through a Community Garden Plot</i> Jebunnessa Chapola (Chair)</p> <p><i>My Learning from a Community Garden</i> Prarthona Datta</p> <p><i>My Learning Stories from a Community Garden</i> Prokriti Datta</p> <p>Room: Tipi, The Bowl</p> <p>● ●</p>	<p>Mindfulness Now! Nature Connectedness for the Busy Corporate World Barrett Miller</p> <p>Room: Arts 202</p> <p>●</p>	<p>Leading Students Outside and the Outdoor Council of Canada Nick Townley</p> <p>Room: Arts 210</p> <p>● ●</p>	<p>Educating Students About Water Quality and Quantity and Climate Change Nicole Hancock & Tim Molnar</p> <p>Room: Arts 206</p> <p>★ ●</p>	<p>Making the Case for Grasslands and Forests</p> <p><i>Planting Trees, Afforestation; the Solution to Earth's Environmental Dilemma</i> Julia Adamson</p> <p><i>Mitigating Climate Change Through Food Forestry</i> Nicola Thomas (by videoconference)</p> <p><i>Saskatchewan Native Prairie Inventory, An Estimation of Remaining Grasslands</i> Joanne Marchand (Chair) & Teal Fisher</p> <p>Room: Arts 212</p> <p>● ●</p>	<p>Process Considerations for Sustainability Uptake in Education</p> <p><i>Waiting for Godot: Climate Change and Leadership in Higher Education</i> Paul Kolenick</p> <p><i>Education for Eco-civilization: A Whiteheadian Perspective</i> Robert Regnier (Chair)</p> <p>Room: Arts 214</p> <p>●</p>	<p>Using Outdoor Learning to Decolonize Education Chris Clark, Charlie Conner, & Joe LaChance (Chair)</p> <p>Room: Arts 213</p> <p>★ ●</p>
6:30pm	SASKOUTDOORS 50 TH BIRTHDAY PARTY & AWARD SHOW WITH BELLE PLAINE AT LOUIS'							
SUNDAY, MAY 12								
7:00-8:00am	MEEWASIN VALLEY BIRD WALK WITH SASKATOON NATURE SOCIETY (MEET AT PARKING LOT NORTH OF DIEFENBAKER CANADA CENTRE ON THE UoFS CAMPUS. DRESS WARMLY)							
8:00-8:30am	COFFEE AT NEATBY-TIMLIN THEATRE							
8:30-9:15am	** LAURIE ADKIN KEYNOTE ADDRESS: UNIVERSITIES, CLIMATE BREAKDOWN, AND THE PRODUCTION OF KNOWLEDGE FOR POST-CARBON TRANSITION IN NEATBY-TIMLIN THEATRE, ARTS 241							
<p>Concurrent Session # 6</p> <p>9:30-10:30am</p>	<p>Local Climate Change Learning Resources Garth Pickard</p> <p>Room: Arts 263</p> <p>★ ●</p>	<p>Natural Curiosity: The Importance of Indigenous Perspectives in Climate Education Haley Higdon, Rosa Na, & Brianna Olson-Pitawanakwat</p> <p>Room: Tipi, The Bowl</p> <p>★ ●</p>	<p>Debriefing Safe Space EECOM Board Members</p> <p>Room: Arts 201</p> <p>★ ● ● ● ●</p>	<p>Clean Schools' Place-based and Solution-driven STEM Workshops Amanda Ring & Devin Radcliffe</p> <p>Room: Arts 210</p> <p>★ ●</p>	<p>'Leap into Action' - An Educator's Guide to Environmental Action Gareth Thomson</p> <p>Room: Arts 206</p> <p>●</p>	<p>Climate Change Mitigation in the Classroom</p> <p><i>Implementing Climate Change Education Projects in New Brunswick Schools</i> Geoff MacDonald (Chair)</p> <p><i>Human Causes of Climate Change</i> Glenn Sutter & Bernadette Slager</p> <p>Room: Arts 212</p> <p>★ ●</p>	<p>A Changing Atmosphere in Canada: Teaching & Learning About Climate Change Adam Young (Chair), Shannon Harding, Maureen Jack-LaCroix, & Shane Patey</p> <p>Room: Arts 214</p> <p>★ ● ●</p>	<p>Planning to Overcome Perceived Barriers: Tailoring ESE for Diverse Learners Laura Sims & Marie-Élaine Desmarais</p> <p>Room: Arts 213</p> <p>●</p>
10:30-10:45am	SNACK BREAK							

Note: schedule is subject to change as activities are confirmed. Last Updated May 6, 2019

LEGEND

- [Workshops](#)
- [Panel Presentations](#)
- [Posters & Special Events](#)
- [Keynote](#)
- [Exhibit Fair](#)
- [Field Trips](#)

← Click!

- ★ Climate Change Ed
- Indigenous Ed
- PreK-12 Ed
- Higher Ed
- Community Ed

SUNDAY, MAY 12

<p>Concurrent Session # 7</p> <p>10:45-11:45am</p>	<p>Birds in a Changing Climate: How Can We Help? Liza Barney & LeeAnn Latremouille</p> <p>Room: Arts 263</p> <p style="text-align: center;">★ ●</p>	<p>Pimohtēwin - Walking Softly with the Earth Marcia Klein & Joseph Naytowhow</p> <p>Room: Tipi, The Bowl</p> <p style="text-align: center;">★ ●</p>	<p>Change is not a Choice ... It is an Opportunity of a Lifetime Garth Pickard</p> <p>Room: Arts 202</p> <p style="text-align: center;">● ●</p>	<p>The Pathway to Stewardship and Kinship Peter Elliott, Jacob Rodenburg, & Cathy Dueck</p> <p>Room: Arts 210</p> <p style="text-align: center;">● ●</p>	<p>Exploring the Hidden World around you with Origami Microscopes Paul Stinson</p> <p>Room: Arts 206</p> <p style="text-align: center;">●</p>	<p>#185daysofwalks AnaBela Ferreira Luis</p> <p>Room: Arts 212</p> <p style="text-align: center;">●</p>	<p>Student Action Matters: The Value of Experience in Helping Nature Kathy Nguyen & Sarah Winterton</p> <p>Room: Arts 214</p> <p style="text-align: center;">★ ●</p>	<p>Inquiry and Citizen Science Approaches in Urban Education</p> <p><i>Conserving Natural Environments through Citizen Science</i> Kenton Lysak</p> <p><i>Urban Place-Based Pedagogies and their Role in Native Prairie Education</i> John Paul Wasan</p> <p><i>Biodiversity Education for Fostering Action on Climate Change</i> Polly Knowlton Cockett (Chair)</p> <p>Room: Arts 213</p> <p style="text-align: center;">★ ● ●</p>
<p>12:00-12:30pm</p>	<p>CONFERENCE CLOSING SESSION IN NEATBY-TIMLIN THEATRE, ARTS 241</p>							

CONFERENCE EXTRAS

Livestreaming!

We will be livestreaming portions of the EECOM 2019 conference.

- **Keynote Addresses** on eecom.org/eecom-2019
 - **Friday, 8:30-10:15am:** Opening ceremony and Tim Swinehart (PreK-12)
 - **Saturday, 8:30-9:15am:** Sylvia McAdam & Sheelah McLean (Community Ed)
 - **Saturday, 1:00-1:45pm:** Eriel Deranger (Indigenous Ed)
 - **Sunday, 8:30-9:15 am:** Laurie Adkin (Higher Ed)
- **Saturday, 10:30am to 5:30pm:** Workshops and panels with a focus on climate change education on eecom.org/eecom-2019
- **Friday, 8-8:45 pm:** The EECOM awards ceremony will be livestreamed on the EECOM Facebook page via [Facebook Live](#)

Coming soon to a home page near you! Livestreaming of some EECOM 2019 sessions!



If you have any playback issues during the live stream, please refresh your browser window.

Debriefing Safe Space Room

Friday, May 10, 10:30-11:30 am and Sunday, May 12, 9:30-10:30am

Arts 201

Facilitators: Members of the EECOM Board

This room is a place to carry on discussions on the topics you are interested in. The space welcomes conference attendees to engage in further discussion on topics of their choosing in a facilitated environment, whether in groups or all together. Whether it is a catalyst for a revolutionary idea, or a place to decompress, the room is available for you to engage in further discussion that suits your needs. Knowing climate change is a complex topic, we want to ensure all conference attendees have a space for their own social and mental well being, while also a place to further expand on your ideas and thought process. The room will be facilitated by EECOM Board Members.

Five Senses Mindfulness Walk

Friday, May 10, 12-1 pm

Start at Diefenbaker Canada Centre Parking Lot

Facilitator: Barret Miller

Join FortWhyte Alive's Barret Miller for a Five Senses Mindfulness Walk! This experience helps us to connect authentically the land, to living things around us, and reminds us of our place in the natural world. It connects us with our own perceptions, fears and hopes, needs, and wants. Participants have report heightened senses, a deep and lasting feeling of calm, and a strong feeling of connection to place following this activity. The Meewasin River Valley will be a perfect place to de-stress after travel, connect with others and the place, and get ready for an amazing EECOM conference!"

Rise and Shine Yoga

Saturday, May 11, 7-8 am

The Bowl

Facilitator: Stephanie Ortynsky, Hot Yoga on 20th

With Day 1 of the EECOM Conference full of exciting keynote addresses and field trips—not to mention that incredible reception at the Remai Modern Art Gallery, you may find yourself a bit stiff on Saturday morning. Join Hot Yoga on 20th's Stephanie Ortynsky as she leads you through a fun and invigorating practice that will wake you up and get your body ready for Day 2 of the conference. Mats will be provided but please bring your own if you have one. This event will be rain or shine so dress in layers!

Meewasin Valley Bird Walk

Sunday, May 12 7-8 am

Start at Diefenbaker Canada Centre Parking Lot

Facilitator: Saskatoon Nature Society

Join the Saskatoon Nature Society on an early morning bird walk around the Meewasin River Valley. Check out Saskatoon's local wildlife, and enjoy beautiful views of the city's river and downtown. You might even see some white pelicans at the weir! This morning activity will leave you feeling refreshed and ready for the final day of the EECOM 2019 conference! Dress in layers, rain or shine.

KEYNOTE SPEAKER BIOGRAPHIES

[View livestream at eecom.org/ecom-2019!](http://ecom.org/ecom-2019)

INDIGENOUS EDUCATION



ERIEL DERANGER

Saturday, May 11, 1:00 pm
Neatby-Timlin Theatre, Arts 241

Eriel Tchekwie Deranger is a Denesuline Indigenous woman and a member of the Athabasca Chipewyan First Nation, Treaty 8 Northern Alberta. She is the Executive Director and co-founder of Indigenous Climate Action. Deranger is recognized for her role in creating the UN Indigenous Youth Caucus; interventions at UN Climate Summits; lobbying government officials in Canada and internationally; developing the Tar Sands Healing Walk; spring boarding one of the first internationally-recognized Indigenous rights-based divestment movements; and developing and leading mass mobilizations highlighting the inequity of fossil fuel industry impacts on the rights of Indigenous peoples. Deranger’s work has a reputation for bridging the environmental and Indigenous rights movements together and building an Indigenous rights based approach to challenging fossil fuel development.

Tim Swinehart teaches social studies at Lincoln High School and the Graduate School of Education at Lewis and Clark College in Portland, Oregon. He was the recipient of the 2015 Oregon Outstanding Social Studies Teacher of the Year award and a long time organizer with the Portland Area’s Rethinking Schools and Northwest Teaching for Social Justice Conference. He is co-editor of *A People’s Curriculum for the Earth: Teaching Climate Change and the Environmental Crisis*, which teaches about environmental and social justice and includes classroom-ready resources such as graphics, role-plays, poems, and stories about climate change. He also currently serves on the Portland Public Schools Climate Justice Committee. Tim spends his off days with his daughters Zadie and Mira, riding bikes, playing music, and making protest signs.



TIM SWINEHART

Friday, May 10, 8:30 am
During Opening Ceremony
Neatby-Timlin Theatre, Arts 241

PRE-K-12 EDUCATION



Laurie Adkin

**Sunday, May 12, 8:30 am
Neatby-Timlin Theatre, Arts 241**

Laurie Adkin is a Professor in the Department of Political Science at the University of Alberta. She is a pioneer of political ecology studies in Canada and has studied environmental policy-making and movements since the 1980s. Dr. Adkin’s areas of expertise include political ecology, Canadian climate change policy, democracy, and social movements. Since 2002, Dr. Adkin has studied the political economy of climate change policy in Alberta and Canada, as well as the role of provincial consultation processes in informing and legitimating Alberta’s policy directions. Her 2009 book, *Environmental Conflict and Democracy in Canada*, revealed how democracy must be extended to achieve a socially just, ecologically sustainable society.

Sylvia McAdam (Saysewahum) is from the Treaty 6 lands in what is now “Canada.” She is a direct descendant of Treaty and Original peoples of these lands. Sylvia is from the nēhīyaw Nation. She has her Juris Doctorate from the University of Saskatchewan and a Bachelor’s degree in Human Justice from the University of Regina. Sylvia is co-founder of a global grassroots Indigenous-led movement called “Idle No More.” Sylvia is also co-founder of the “One House Many Nations” Campaign, which designs off-the-grid sustainable tiny-homes to address and raise awareness about the epidemic unacceptable proportions of homelessness in a wealthy state as “Canada” especially amongst Indigenous and Original peoples.



Sylvia McAdam
Saturday, May 11, 8:30 am
Neatby-Timlin Theatre, Arts 241



Sheelah McLean

Sheelah McLean has a PhD in Anti-Racist education from the University of Saskatchewan. She has worked as a high school teacher and taught graduate and undergraduate courses in the College of Education for over 15 years. Sheelah is also an organizer with the Idle No More network. As an educator, scholar and community organizer, Sheelah’s work has focused on research projects and actions that focus on the legacy of oppression experienced by Indigenous Peoples within a white settler society. Sheelah has received many honors for her work in social justice including the University of Saskatchewan’s Alumni of Influence Award (2013), the Council of Canadians Activist of the Year Award (2014) and the Carol Gellar Human Rights Award (2015).

INFORMATION FOR PRESENTERS AND CHAIRS

GENERAL INFORMATION

- The majority of the main conference will take place in the Arts Building of the UofS Campus; the campus' main green space and the Meewasin River Valley are both in close walking distance.
- Each room except the tipi will be equipped with AV (computer, projection screen, sound system) for PowerPoint presentations
- Wifi access will be available
 - Username: eecom2019
 - Password: climateaction

CONSIDERATIONS FOR PRESENTERS

- Please consider ways to ensure your session is interactive and engaging, particularly if you are offering a workshop.
- Consider the audience who will attend the EECOM conference, ensuring your offering has broad appeal and practical implications for education stakeholders.
- Ensure your conference contribution will fit within the time allotted to you.
- French presenters are encouraged to have bilingual presentations, e.g., English oral presentation with French slides, or vice versa.
- Consider implications for climate change education, including attending to systemic implications as applicable in your presentation, workshop, or poster.

I JUST NOTICED I'M A CHAIR! WHAT IS THAT?

For the panel presentations, one presenter in each panel presentation has been assigned to be the session's chair. The chair is responsible for logging into the computer and assisting uploading slide shows (don't worry, instructions will be in the room!). Chairs will introduce the session, and ensure all presenters are given equal opportunity to speak, that sufficient time is given for audience interaction, and that the session ends on time. We suggest chairs arrive at the room at least 5 minutes early to log into the computer and assist with presentation uploads.

To log in to the computer enter:

Username: eecom2019

Password: climateaction

The conference program and the detailed concurrent session schedule indicates who each session's chair.

GOING OUTSIDE

Presenters are welcome to move their sessions outside if they wish but please ensure your session ends on time. The UofS has several green spaces located in the centre of its campus, all within close walking distance of the Arts Building.

INFORMATION ABOUT SESSION TYPES

Pre-conference Sessions (various)

Pre-conferences are interactive workshops of varying lengths and formats. The EECOM 2019 pre-conference offerings comprise eight sessions designed to develop skills and knowledge along the four conference strands of Indigenous, PreK-12, Higher, and Community Education.

Workshop (60 minutes)

Workshops are in-depth sessions that actively develop specific professional competencies and have widespread potential for implementation. They should include interactive activities to engage with the audience. Workshop facilitators will be responsible for ensuring their session starts and ends on time.

Panel Presentations (60 minutes)

Panel presentation sessions focus on a single topic or related topics. Panels typically include a talk or media presentation but can also include an interactive component, such as a short discussion. Two to three presentations on related topics will be grouped together, and approximately 15 minutes provided for Q&A and audience interaction at the end of the session. If you have 2 presentations in your session, presentations can be about 20 minutes long. If you have 3 presentations in your session, presentations should be about 15 minutes long.

Poster Session (60 minutes)

Posters are two-dimensional printed presentations illustrating research studies, programs, or other work. Posters are fixed to bulletin boards for conference participants to review at their leisure. Presenters will be expected to be available to share their posters, answer questions, and interact with attendees during the scheduled poster session time. We recommend poster dimensions be approximately 3' X 4'.

PRE-CONFERENCE WORKSHOPS

Thursday, May 9

Boreal Forest Eco-Tour

SunDogs Excursions, Prince Albert National Park, Glenn Sutter, & Joyce Belcher

Wednesday, May 8 - Thursday, May 9

9:30 am on May 8: Bus to PA National Park - Bus Pick Up at University of Saskatchewan Education Building – East Doors

3:30 pm on May 9: Bus to Saskatoon

Join us for a pre-conference ecotour to Prince Albert National Park area. We will be staying at the iconic Elk Ridge Resort in cabins, located in a friendly luxurious setting in the heart of the boreal forest. Hike along the trails of the national park with park interpreter staff, participate in nature writing with True Nature writing, spend an entire morning on a climate change and nature focused program led by SunDogs Excursions, sing around a campfire with Glenn Sutter, a local musician. Arrive back in Saskatoon on Thursday evening in time for conference evening activities.

Mapping out a Strategic Path to Advance Ocean Literacy in Canadian Classrooms and Communities

Lisa (Diz) Glithero (Canadian Ocean Literacy Coalition) and Danika Strecko (Ocean Wise)

Room 3133, Education Building, University of Saskatchewan

Thursday, May 9, 9 am-1 pm

The health of the ocean is a global priority, signified by the UN's Decade of Ocean Science for Sustainable Development (2021-2030). Making ocean literacy more prominent in Canadian K-12 classrooms is crucial element to developing an ocean literate society wherein citizens and stakeholders are "able to make informed and responsible decisions on ocean resources and ocean sustainability." (Ocean Literacy for All: A Toolkit, UNESCO, 2017, p. 16.) The aim of this workshop is to convene interested education stakeholders to build off the work of CaNOE's conference for ocean educators in July 2018 and to engage in critical discussions on developing more strategic and coordinated pathways to (better) embed ocean literacy into Canadian K-12 curricula. Although national interest in ocean health and conservation is increasing, many young Canadians (and teachers) have limited opportunities to engage in ocean literacy education opportunities that foster not only awareness but moreover, agency and action. This workshop will also enable ocean education leaders to a) collaborate on identifying key mobilization activities, joint initiatives and/or upcoming opportunities to co-leverage (e.g., National Science Literacy Week 2019 — ocean theme) and b) gather strategic input from the education sector to feed into the Canadian Ocean Literacy Coalition's efforts to develop a national ocean literacy strategy before the start of the UN decade. This pre-conference is being supported by the Natural Sciences and Engineering Research Council of Canada (NSERC).

Sustainability Education Policy Forum

Marcia McKenzie & Nicola Chopin, SERI

Room 2010, Education Building, University of Saskatchewan

Thursday, May 9, 10 am-12 pm

This session is for teachers, administrators, and policy-makers. Discuss key learnings from a series of case studies conducted by the [Sustainability and Education Policy Network](#) in 20 K-12 schools about the relationships between sustainability in education policy and practice. Participants will discuss the implications for addressing gaps between the two in relation to sustainability uptake in education.

Project WET Canada 2019-2021 Implementation Strategy Workshop

Lizabeth Nicholls, Project WET Canada

Room 1020, Education Building, University of Saskatchewan

Thursday, May 9, 12-4 pm

This workshop is for provincial and territorial Project WET Coordinators and senior Project WET Facilitators throughout Canada to provide input to an Implementation Strategy for 2019 – 2021 to best reach northern, Indigenous, and Francophone/French Immersion educators with Project WET 2.0, Project WET- Module 1 (French) and Getting Little Feet WET (ECE) certification professional development workshops. Lunch and refreshments will be provided.

Helping Environmental Education Associations Build their Capacity – An EECOM Leadership Summit

Alberta Council for Environmental Education (Gareth Thomson) & SaskOutdoors (Leah Japp)

Room 2002, Education Building, University of Saskatchewan

Thursday, May 9, 12-5 pm

In this full day workshop, you will participate in organizational development activities to support your association, contribute to a change agenda to advance environmental education in Canada and where you live, and launch a national network. This workshop is designed for Canadians who work with their provincial or territorial environmental association, and will include a networking social from 4-5 pm.

University of Saskatchewan Campus Sustainability Walking Tour

Matt Wolsfeld, UofS Office of Sustainability

Meet at University Services Building Entrance, University of Saskatchewan

Thursday, May 9, 1-2:30 pm

Join the University of Saskatchewan's Office of Sustainability on a walking tour that highlights sustainability initiatives and operations around the university's beautiful campus, including gardens, green buildings, and cultural sustainability touchstones.

Relational Healing, Climate Change, and Indigenous Land-based Learning

Jeff Baker & Kevin Lewis, UofS

Tipi in the Bowl, University of Saskatchewan

Thursday, May 9, 1-4 pm

In this session Drs. Kevin Lewis (Cree) and Jeff Baker (Métis) will lead participants in ceremony and land-based activities that provide teachings regarding our interconnectedness with the land, one another, and the cosmos; and discuss the importance of these understandings for addressing climate change and socio-ecological justice more broadly.

Brewing Beer Naturally

Barrett Miller

9 Mile Legacy Brewing, 229 20th Street W, Saskatoon

Thursday, May 9, 6:00-10:00 pm

The 9 Mile Legacy is a story of two families- neighbours that have weathered hard times and celebrated good times together for the better part of a century. We are called "9 Mile Legacy" because we aren't that original - we are simply carrying on generational tradition of working together. For this workshop, 9 Mile will be hosting Barret Miller, a home brewer from Forte Whyte Manitoba, who has been brewing his family beer since he was knee high to a grasshopper. In this workshop, Barrett will teach you how to brew a prairie beer, using a technique perfected by his grandfather.

Brewer for an evening includes:

- Learn to brew with Barret Miller alongside head brewer and co-founder of 9 Mile Legacy Brewing Garrett Pederson
- Orientation and instructions before you mash in
- All materials included
- Finish your evening with a 9 Mile Legacy Beer!

POSTER SESSION ABSTRACTS

Friday, May 10

Garry Room, Marquis Hall

11:30am - 1:00pm

University Students' Experience with City Public Transportation

Strands: ●

Mengyan Huang & Jun Li, University of Saskatchewan

This study aims to encourage university students with children to use more city public transportation (CPT) service instead of their personal vehicles. From cultural perspectives, a transdisciplinarity (TD) approach is used to explore the university students' experience with CPT, reasons cause such experience, what CPT department can do to improve their services to better meet this group of students' needs, and what types of support university can provide to assist the students to access CPT more frequently.

Mapping Saskatchewan Grain Farms to Enhance Climate-Friendly Farm Practices

Strands: ★ ●

Alana Krug-MacLeod, University of Saskatchewan

Saskatchewan grain farmers have the potential to help Canada reach its climate change goals. As a summer undergraduate student researcher, I worked on a multi-year project that aims to help farmers visualize changes they can make on their farms to foster sustainability. I mapped their farmland so they could find ways to benefit more from nature's ecosystem services— benefits like carbon sequestration, fertility, diversity, and adaptability, that nature provides—to increase their productivity and profitability while reducing harm. Through research and education, this project helps foster farming practices that will address climate change.

The Use of Informal Education in Climate Change

Strands: ★ ●

Ngnyuy Lovett Fomonyuy Khan

Recent happenings have showed that climate change is real and the further if care is not taken will be worse. The best way to guarantee a healthy tomorrow is to introduce climate change lessons at every level of the human society. It is normal today to see rich and famous people who do not care about climate change and its consequences. It is better to take climate change education from the classroom to the streets, open gardens, fields, sporting activities and to our homes. Let the people be conscious from the base of these dangers because the environment is precious.

The Five E's of Active School Travel & Climate Action

Strands: ●

Heather Mitchell, Green Action Centre

The Active and Safe Routes to School program has been working in Manitoba for over a decade to encourage active school travel through programming, events, and consultation. Getting children out of cars and walking or cycling to school instead is important for the planet and human health. Making this happen requires five different interventions - also known as the Five E's - Education, Encouragement, Engineering, Enforcement and Evaluation. Education and Encouragement activities are a great starting point for many schools; they help raise awareness of and celebrate the benefits of active school travel.

Nurse Educators' Perceptions of Ecoliteracy in Undergraduate Nursing Programs

Strands: ●

Jennifer Morin, Red River College

Nurses are in a position to address environmental health concerns related to human health, and as a result, may be required to incorporate environmental health concepts into practice. Yet, there is evidence that nurses' lack of environmental health training is a barrier to incorporating environmental health concepts into practice. The purpose of this study was to explore nurse educators' perceptions of ecoliteracy in undergraduate nursing programs. To address the barriers that would support an ecoliterate nursing workforce, innovation in undergraduate nursing education as well as continuing education is required.

Indigenous Community Gardens for Nutrition and Sustainability Education

Strands: ● ●

Veronica Santafe Troncoso, School of Environment and Sustainability, University of Saskatchewan & Gabriela Santafe Troncoso, Health Sciences Department, Pontificia Universidad Catolica del Ecuador

This participatory research explores the material and non-material values of Indigenous community gardens among Kichwa people in the Amazon region of Ecuador. It focuses on two cases: A medicine center where Kichwa midwives use agroforestry practices to promote their ancestral ways of health and healing, and a community-based tourism project where Kichwa women promote their traditional food systems through tourism. The results show that these gardens have been crucial to access to healthy and culturally appropriate food for the families that are part of these projects. Furthermore, these spaces are an opportunity for intercultural co-learning between Indigenous and non-Indigenous people.

Educating Youth on How Food Choices Affect their Carbon Footprint

Strands: ★ ● ●

Lauren Saville, Jane Goodall Institute

The Jane Goodall's Roots & Shoots Sustainable Food Initiative is a comprehensive program that promotes sustainable food education by helping students understand the link between their food choices and climate change. This poster will illustrate the different streams for students to engage on this issue from elementary to post-secondary levels. The poster will include examples of youth led community mapping of food choices and climate change issues, our high school sustainable food campaign and our post-secondary sustainable food projects. There will be information about how educators can get involved in these programs, as well as sustainable food curriculum guides.

Sustainability in Education

Strands: ●

Mani Ram Sharma, Mahendra Ratna Campus

This proposal would be to study the Innovative Practices of rural people of Nepal in language learning and ways that contributed to the present growth. I will do the literature review of the innovative practices undertaken by people of some countries in other western and eastern world. Comparing this, I would like to come up with the scientific principles hidden behind all these practices. I will then develop strategies to relate these rich practices with the contents of the textbooks that we teach today. This should be able to fulfill most of the SDGs and give an important place to what the indigenous practices really meant for maintaining a sustainable future and I will hopefully come up with a balanced view of education for sustainable development.

PRESENTATION & WORKSHOP ABSTRACTS

Friday, May 10

Concurrent Sessions and Workshops #1

10:30am - 11:30am

Climate Change Education and Student Leadership

Panel Presentation

Friday, May 10, 10:30am-11:30am
Arts 263

Strands: ★ ●

Practicing Climate Actions: A Practice Perspective on Climate Change Education

Presenter: Kristen Hargis, University of Saskatchewan

With only twelve years remaining to address the most damaging effects of climate change, it is becoming increasingly apparent that current approaches to climate change education are not engendering enough action in enough time. This session begins by overviewing current approaches to climate change education, which have largely relied on instilling individual, scientific cognitive clarity. The potential of practice approaches are then considered, which shift focus from individual ability to collective practices.

Off the Grid: Students Take the Lead on Climate Justice

Presenter: Dianne Miller, University of Saskatchewan; & Michael Prebble and Jocelyn Dupuis, Saskatoon Public School Division

This presentation presents the findings of a year-long case study of an integrated program in Grade Nine (Social Studies, Science, English Language Arts, and Art) at Tommy Douglas Collegiate (TDC) in Saskatoon, Saskatchewan. Off the Grid seeks to engage youth with issues of environmental sustainability and climate justice through student-led research and campaigns to reduce the ecological footprint of the school building. Through consideration of student projects and focus groups detailing their experience, the research team documented strong growth in students' confidence in leadership skills and environmental knowledge, and capacity to lead sustainability initiatives.

Teaching Adaptation & Mitigation: Interdisciplinary Climate Change Workshop for Teachers

Workshop

Friday, May 10, 10:30am-11:30am
Tipi in The Bowl

Strands: ★ ●

Presenter: Adam Young, EECOM Chair & Adam Greenberg, Natural Resources Canada

This interactive workshop explore resources created for Grade 6-12 teachers on climate change education. The resources will include an interdisciplinary unit on using photos to explore climate change, how to interpret scientific data, and climate change's effects on Canadian environment, society, and the economy. Attendees will test their own climate change knowledge and learn how to use some innovative strategies and activities to make these challenging conversations engaging and thought-provoking for their students.

"Rising Tides" - Trends in Canadian Ocean Literacy

Panel Presentation

Friday, May 10, 10:30am-11:30am
Arts 202

Strands: ★ ●

Presenters: Anne Stewart, CaNOE; Sarah MacNeil, Canadian Ocean Literacy Coalition; Danika Strecko, Ocean Wise; & Shane Patey, Ingenium

What does Ocean Literacy mean to different communities and organizations across Canada? What strategies are most effective in creating strong ocean connections for coastal and land-locked Canadians? A selection of education leaders from across the country will tackle these questions and more during an interactive panel discussion that delves into the trends in Canadian Ocean Literacy. EECOM members are welcome to participate and add questions to further the panel discussion.

Student Action for a Sustainable Future

Panel Presentation

Friday, May 10, 10:30am-11:30am

Arts 210

Strands: ★ ●

Presenters: Pam Belcher, Saskatchewan Environmental Society; Angie Bugg, Saskatchewan Environmental Society; Sam Gunn, Saskatoon Public Schools; with representatives from Greater Saskatoon Public Schools and the City of Saskatoon

The purpose of the SASF program has always been to provide teachers with appropriate levels of expert support to allow them to do inquiry and action projects that achieve greenhouse gas emissions reductions. The goal is to support teachers to become confident in providing environmental sustainability education in the classroom. Students research, plan and implement action projects, audit and calculate results including greenhouse gas emissions reductions. Projects are shared with other students, parents, and partners at a public showcase. Students and partners work together in a learning environment that promotes leadership building, and confidence in acting to achieve GHG reductions.

Climate Action in Eco-Certified Schools

Panel Presentation

Friday, May 10, 10:30am-11:30am
Arts 212

Strands: ★ ●

#ClimateAction in EcoSchools

Presenter: Lindsay Bunce, Ontario EcoSchools

How can schools implement climate change education all year round? Lindsay Bunce, Executive Director of Ontario EcoSchools, will share transferable tips based on 14 years of EcoSchools certification. She'll explore climate change education success points such as student-centered action, linking environmental learning with campaigns, and engaging all levels of the education sector. You'll leave with ideas on how to inspire students and support busy teachers in taking #climateaction.

Small School: Big Ideas- "Simply Living Simply"

Presenter: Terri Munn, Bruce Peninsula District School

Join the gang from Bruce Peninsula District School (K- grade 12) on our journey of "Simply Living Simply", a school wide, year long approach to climate change. We tackled the dark side of Climate Change and came away seeing the light! Through monthly assemblies, hands-on activities, energy and waste audits, gardening, and working with community partners and sharing our work using the webpage we created: www.bpdslivessimply.org we found a positive way to tackle Climate Change through Education. Let us share our successes with you...and you'll leave knowing how to many great creations.

One House Many Nations: Hacking Colonial Systems of Dominance

Workshop

Friday, May 10, 10:30am-11:30am
Arts 214

Strands: ●

Presenter: Alex Wilson, University of Saskatchewan

One House Many Nations (OHMN) is an Idle No More campaign to raise awareness about, and provide environmentally sustainable solutions to, the housing crisis for Indigenous peoples in Canada. Over the past three years, the ideas embodied in the OHMN movement have been branching and evolving at the Opaskwayak Cree Nation. What started out as one house in Big River, Saskatchewan, is transforming into a community village design project that is addressing the housing crisis by developing systems to hack the same colonial systems that make and keep Indigenous people houseless. This work is focused on land defense by using housing to build and share community knowledge, generate local economies, and develop architectures that enhance the health of the land.

Innovative Approaches to Sustainability in Higher Education

Panel Presentation

Friday, May 10, 10:30am-11:30am
Arts 213

Strands: ●

Using a Hackathon to Engage Students in Environmental Problem-solving

Presenters: Elizabeth Kuley, Shelley Neufeld, Noreen Predicala, & Matt Wolsfeld, University of Saskatchewan

The University of Saskatchewan hosted EcoHack, a novel environment/sustainability themed hackathon, focused on connecting undergraduate/graduate students with real environmental challenges. Challenges were sourced from local community partners (companies, government, community organizations, etc.) and students chose an environmental problem they wanted to focus on for the duration of EcoHack.

Designing Change for a Living Planet: Student Leadership on Campus

Presenter: Kathy Nguyen, World Wildlife Fund (WWF) Canada

What's the Next Big Shift? From bike share to online paperless banking, innovations are changing how we shop, commute, learn, access entertainment, and connect with others. Every year, through Living Planet @ Campus, WWF calls for ideas to accelerate change at our Designing Change for a Living Planet competition. Multidisciplinary student teams from different colleges and universities come to WWF to design and pitch their ideas to launch the next big shift in our daily lives. We will share our approach, findings, and accomplishments, inviting participants to utilize this framework to engage their audiences.

Saturday, May 11

Concurrent Sessions and Workshops #2

10:30am - 11:30am

Youth Climate Action: Engaging and Empowering Youth in Community

Workshop

Saturday, May 11, 10:30am-11:30am
Arts 263

Strands: ★ ●

Presenter: Jennifer Williams, Students on Ice

Come explore youth community service and civic engagement through the lens of climate action and share success stories, discuss barriers, and brainstorm possible solutions. The Students on Ice Climate Action Cohort (CAC), will be one example shared to inform this conversation. The CAC is a new initiative designed to bridge the gaps between policy decisions, community action and youth engagement through youth-led community initiatives geared to address climate change at a community level while also engaging youth in international policy meetings. Let's explore how this model, and others, can be applied in communities to get youth engaged with climate action!

Talking Dirty About Climate Change: 4R Nutrient Stewardship

Workshop

Saturday, May 11, 10:30am-11:30am
Parking Lot G

Strands: ★ ●

Presenter: Mitchell Timmerman, Manitoba Agriculture; Bob Adamson, Ray Cochrane, & Kent Lewarne, Nutrients for Life
The rain will fall and the snow will melt during this exciting, interactive exploration of agriculture as both a source of greenhouse gas (GHG) emissions and a source of potential solutions for addressing climate change. Various crop production and land management scenarios will be showcased, along with related fertilizer and equipment props, to explain how nitrous oxide (N₂O), the most potent GHG, is created in part by the application of nitrogen (N) fertilizers to cropland. 4R Nutrient Stewardship encourages farmer adoption of practices that mitigate nutrient losses to the greater environment, including N₂O from N fertilizers.

Municipal Climate Action Leadership

Panel Presentation

Saturday, May 11, 10:30am-11:30am
Arts 202

Strands: ★ ●

Local Actions: The City of Saskatoon's Climate Change Adaptation Strategy

Presenter: Kristin Bruce, City of Saskatoon

Saskatoon's Adaptation Strategy is a vital component of the City of Saskatoon's overarching Climate Plan, and it has strong links to other strategic initiatives such as risk management, asset management, and the Green Strategy. Through this work we are proactively preparing our organization to face impacts and mitigate risks to key infrastructure, programs and services posed by a warming climate and more frequent and intense storms. Our plan is guided by the ICELI Local Governments for Sustainability 5 Milestone Approach. This presentation will provide an overview of our journey from climate risk research to co-designed solutions.

The City of Saskatoon's Low Emissions Community Plan Update

Presenter: Hilary Carlson, City of Saskatoon

This presentation will include a detailed update on the progress and findings of the Low Emissions Community Plan currently being developed by the City of Saskatoon. This is Saskatoon's Climate Mitigation Strategy with the full plan and report to be released in June 2019.

Cross-curricular Approaches to Environmental Education

Panel Presentation

Saturday, May 11, 10:30am-11:30am

Arts 210

Strands: ★ ●

Evaluating Cross-Curricular Environmental Education

Presenter: Devin Radcliffe, Clean Foundation

Clean Foundation presents a workshop on Cross-Curricular Environmental Education. In this workshop participants take an inquiry-based and participant-centred approach to evaluating and planning cross-curricular environmental education curricula and learning activities for Pre-K to 12, using the Clean Foundation's experiences with creating cross-curricular environmental education resources specific to the Nova Scotia P-12 curriculum. We will review the history and theory of cross-curricular and environmental education and the main successes over the past 30 years and use that foundation to assess the potential successes of a given learning activity. Participants will also be given an opportunity to share their own experiences with successful and unsuccessful environmental education experiences. Clean Foundation's EnviroEd resources are cross-curricular and examples can be provided on demand.

How Climate Relates to all Aspects of Science Curriculum

Presenter: Tim Stephensen, Walnut Grove Secondary School

In this session, I will demonstrate how I have woven climate issues into most aspects of secondary science classes. I will present ways of teaching the curriculum with a climate perspective, demonstrate experiments/equipment I have used to bring this point clearly to my students. I will make very clear a mindset to teaching climate issues and inspire others to dig deeper in key topics and resources that will allow them to be the passionate and motivating educator. Attendees will leave feeling informed, motivated and excited to get back to the classroom.

Project WET Canada's New French 'Projet WET, Module 1' and 'Getting Little Feet Wet' ECE Combined Workshop

Workshop

Saturday, May 11, 10:30am-11:30am

Education Building 1020

Strands: ●

Presenters: Lizabeth Nicholls, Reid Dingwall, Marcia Klein, & Maxine Koskie, Project WET Canada

Get active in this hands-on, fun workshop about water in our lives! Participants will be placed into one of the following two groups:

Pre-K - Grade 2 Teachers: You will try out sample activities specially adapted from Project WET for Pre-K - Grade 2 teachers. There will be an emphasis on adaptation for Indigenous youth and diverse classrooms and how the activities support curricular outcomes. All participants completing the workshop receive a free hardcopy of the full-colour ECE Activity Guide, Getting Little Feet Wet, a \$29.00 value, made possible by sponsorship from the National Science and Engineering Research Council of Canada (NSERC).

French Educators: You will try out sample activities in the newly produced Canadian, Projet WET, Module 1 for Maternelle to Grade 8. There will be an emphasis on how the activities support curricular outcomes for Saskatchewan, Manitoba and Alberta, and how they are suitable for both diverse learners in multilevel classrooms and outdoor education programming. All participants completing the workshop receive a free copy of the Projet WET Guide d'activités pédagogiques Module 1, made possible by sponsorship from the National Science and Engineering Research Council (NSERC).

Teaching and Learning Approaches to Outdoor and Climate Education

Panel Presentation

Saturday, May 11, 10:30am-11:30am

Arts 212

Strands: ●

Nature Buddies: Students Leading Students in a Nature Inquiry

Presenter: Alison Ellwood, Durham District School Board and Royal Roads University

As part of a Master's thesis at Royal Roads, I would like to share the process and results and recommendations of a Nature Buddies program pairing seventh grade with kindergarten students in order to overcome barriers to teaching and learning outdoors. It was found that an interdisciplinary approach to environmental education with a leadership component positively impacted the motivation of learners; allowed new relationships to form with self, others and nature; created a shift in the control and flow of learning; and highlighted the need for time for appropriate implementation.

What Happens When Learning Goes Outside?

Presenter: Chris Clark, University of Saskatchewan

What is it about being in the natural outdoors that leads to so many positive educational and health outcomes? We will look at the affordances and resources that the natural outdoors has that allows for and promotes improved health, student engagement, community engagement, relationships, behavior, self-reliance, academic achievement, and the decolonization of education. We will engage educators in discussions around ways to leverage these resources to help their students be able to experience these positive outcomes.

Connect, Educate, Inspire: Place-based Education Leading to Climate Action

Workshop

Saturday, May 11, 10:30am-11:30am
Arts 214

Strands: ★ ●

Presenter: Jaclyn Angotti, CPAWS Southern Alberta

Learn how CPAWS Southern Alberta's award-winning education model moves students from awareness to understanding to action; and how you can apply this model in your own community. Before students can take meaningful action on climate change, they must be connected to nature. We will show you fun, educational activities that help students explore and learn about nature. From there, we will demonstrate how action-learning projects engage students in curriculum and provide opportunities for students to take positive, meaningful climate action. You will leave our session with resources to connect youth to nature, educate about climate change and inspire climate action!

Developing Sustainability Leadership Skills in Post-secondary Students

Panel Presentation

Saturday, May 11, 10:30am-11:30am
Arts 213

Strands: ★ ● ●

Graduating Post-secondary Students with Skills to Lead in Sustainability

Presenter: Kathy Nguyen and Sarah Winterton, World Wildlife Fund (WWF) Canada

WWF's Living Planet @Campus supports tomorrow's leaders in learning skills to tackle the challenges of climate change and more they will face. Developed with 12 colleges and universities, students can receive credit for leading sustainability initiatives. Students achieve WWF's Living Planet Leader certification for their resume and LinkedIn, and are recognized on WWF's website. Students become change agents, engaging others to drive sustainability where they live, learn and eventually where they work. We will share our approach, findings, and accomplishments. And demonstrate how educators and organizations can use Living Planet Leader to recruit students to volunteer and build capacity.

The Educação do Campo in Brazil: Practices and Challenges for Environmental and Science Education

Presenter: Marcelo Borges, University of Saskatchewan

In this presentation, I explore the Brazilian higher education system, especially looking at the Educação do Campo undergraduate course. Since 2007, this rural teacher education program has been introduced to more than 40 public universities and technical institutes in Brazil. The course certifies students to work in rural schools (elementary and high school) across different areas of knowledge, and its curriculum focuses on the agroecology and pedagogy of alternation. From a research program on learning and environmental education at the Federal University of Santa Catarina, I describe how experiences in this course have prepared students to address climate change.

Gamifying Sustainability Education and Eco-Literacy in Schools

Presenters: Alayna Chan, Sarah Johnston, & Jasmin Parker, University of Saskatchewan

The presenters have developed a free takeaway package for educators to introduce to their schools, encouraging school-wide participation in the "Sustainability Olympics". This presentation will guide the audience in following the "Map to Sustainability," but who will get there first? The presenters have varied experiences with teaching children/youth and independently identified a significant potential for enhancing children's knowledge about sustainability. We all feel strongly that children of any age should learn about sustainability, and that it can be incorporated into classrooms in a way that is cost effective (or zero cost), and engaging. As part of Sustainability in Action, a course offered by the School of Environment and Sustainability at the University of Saskatchewan, we were tasked with identifying a sustainability issue that we felt passionate about. Collectively, we agreed that one of the ways that we could make the biggest impact in this course was to teach sustainability and enhance eco-literacy in as many children as possible. As a pilot for this larger initiative we revamped and tested the "Green Seal" program at the University of Saskatchewan. The Green Seal program is meant to encourage sustainable practices in summer camps on campus. We have adjusted the Green Seal Map to Sustainability to apply broadly in classrooms, with the option to include an entire school in what we call the Sustainability Olympics.

Saturday, May 11

Concurrent Sessions and Workshops #3

2:00pm-3:00pm

Climate Change Communication and Education

Panel Presentation

Saturday, May 11, 2:00pm-3:00pm
Arts 263

Strands: ★ ●

[View livestream at eecom.org/ecom-2019!](http://ecom.org/ecom-2019)

Storytelling: A Tool for Exploring Climate Change Engagement in Saskatchewan

Presenters: Rachel Malena-Chan, Climate Justice Saskatoon

Storytelling can be used to explore the emotional, social, and cultural dimensions of climate change engagement. Research demonstrates that knowledge alone is insufficient for mobilizing climate action. Educators and community leaders need context-based tools for navigating the complexities of climate change engagement. This session focuses on personal and public narratives and how individuals and groups interpret relevant challenges, choices, outcomes, and morals about climate change. We will provide background about climate change communications best practices alongside local examples about using a narrative approach in practice. Participants will have an opportunity to practice employing a storytelling framework to explore climate narratives.

Having the Difficult Conversation: Climate Change is Real

Presenter: Palash Sanyal, University of Saskatchewan

The workshop will focus on having the critical conversation surrounding climate change in communities hard to reach, change or motivate. What tools can one use? What are ways you can engage a crowd, and how that affects you? The interactive presentation will be about wellbeing, education and constructive change.

Methodologies as Movies, Narrative Environmental Journalism as Sweet as Prose

Presenter: John Currie, University of Toronto Mississauga

Sit back and enjoy as I read environmental journalism as sweet as prose. Methodologies as movies. Findings that flutter. Join me as I share excerpts of my students' published writing, while I invite you to take note of rhetorical moves you hear. I will also speak about the emphasis I take in my course, along with other instructors in my program, to centralize the use of student-authored texts as peer models. Let's discuss the moves. Let's discuss research questions, and let's open the floor to hear about others' teaching experiences.

Engaging Municipalities in Climate Action

Panel Presentation

Saturday, May 11, 2:00pm-3:00pm

Arts 202

Strands: ★ ●

National Climate League: Playing with Ideas like Playing with Pucks

Presenter: Margret Asmuss, Climate Reality Canada and Saskatoon Climate Reality Hub

What if your mayors played with good ideas like our hockey team play with pucks. If we are serious about improving our cities and reducing emissions, teamwork and transparency need to become part of the playbook. Enter the National Climate League. The National Climate League is an initiative of Climate Reality Canada, and strives to provide an engaging way to track local climate project and built support for solutions based on information provided by municipalities from across Canada. The presentation will introduce the National Climate League and discuss how it can be leveraged to educate and engage Canadian citizens.

GHG is a Municipal Issue: Engaging Community and Advising Administration

Presenters: Kathryn Palmer, Dillon Consulting; Brian Sawatzky, Confederation Inn; Sara Harrison, BHP Billiton; Erin Akins, University of Saskatchewan; Sydney Boulton, University of Saskatchewan; Angie Bugg, Saskatchewan Environmental Society; Kari Engele-Carter, Sask Health Authority; Aditi Garg, Saskatoon Environmental Advisory Committee; Sarina Gersher, Saskatoon City Council; Kira Judge, Federated Co-operatives Limited; Andrea Lafond, Meewasin Valley Authority; & David McGrane, University of Saskatchewan;

You will leave with our template for community-level social media engagement and our strategies for communicating with elected councillors and municipal administration. We rely on collaboration and direct administration engagement to make sure we are supporting value-aligned projects “ this has resulted in positive and recognition from council regarding our model and efficacy as a citizen committee. Our presentation will also include an overview of how we influenced our city to address greenhouse-gas emission reduction target setting alongside this public awareness campaign. Through volunteer diligence and positive, consistent community engagement, we can influence change.

Building Capacity for Environmental Education in North America

Workshop

Saturday, May 11, 2:00pm-3:00pm
Arts 210

Strands: ●

Presenter: Sarah Bodor, North American Association of Environmental Education

NAAEE is providing tools and resources that individuals and organizations can use to building capacity for effective environmental education at the organizational, community, regional, or provincial level. From online professional networking platforms to Guideline for Excellence in the field of EE to assessment tools and more, the NAAEE Affiliate Network has more opportunity than ever before to build leadership and share learning to advance environmental literacy. This session will focus on tools and opportunities that you can access right now to better connect with colleagues throughout North America and tap into professional growth and learning.

Bring the Ocean to School on Monday Without Getting Wet

Workshop

Saturday, May 11, 2:00pm-3:00pm
Arts 206

Strands: ●

Presenter: Monika Pelz, Ocean Networks Canada

This workshop will focus on Ocean Networks Canada (ONC) resources and demonstrate how to bring the ocean to any classroom, live, in real time through data and data resources. The presentation will cover accessing ONC's freely accessible live raw data, lesson plans, and classroom plug and play resources. Available to all ocean-interested educators and learners, these tools can be used freely to enhance any lesson or learning goal. Participants will explore example lessons, activities, and inspirations with direct connections to the curriculum and place-based indigenous knowledge that can be used "Monday morning" to bring the ocean to class authentically.

Comparative Analyses of Sustainability and Climate Change Education

Approaches

Panel Presentation

Saturday, May 11, 2:00pm-3:00pm
Arts 212

Strands: ★ ● ● ●

Reorienting Education to Improve the Lives of Indigenous Peoples

Presenters: Charles Hopkins & Katrin Kohl, York University

This global research, "Reorienting Education and Training Systems to Improve the Lives of Indigenous Youth" in more than 40 countries aims to improve the lives of Indigenous youth by enhancing the quality of their education. The research follows a unique community-based participatory approach using Education for Sustainable Development (ESD) at its focus. Results will assist education leaders at all levels by providing policy recommendations. These recommendations will be based on analyzing varying perceptions of what constitutes quality education, collecting examples of good practice and conducting action research. The research is designed to serve the SDG 4 of the 2030 Agenda.

Sink or Swim: Comparative Analysis of Local Climate Change Policies

Presenter: Bradley Ward, Texas Tech University

Human-induced climate change, brought upon by the accelerate release of greenhouse gases, has placed tremendous pressure on both the atmosphere and infrastructure of coastal communities around the world. Policymakers at local, state, regional, and federal levels have begun to develop and implement specifically tailored climate action plans to address these threats in order to continue to protect the economic, social, and environmental security of the state and of local communities. Based on extensive qualitative research, findings reveal find that policymakers in the United States have slowly begun to adopt strategies to address the impact and threats of climate change.

Canadian Climate Change Education Survey: Report on Findings

Presenters: Ellen Field & Paul Berger, Lakehead University

In this presentation, we will be reviewing findings of a national Climate Change Education survey conducted in late 2018 to early 2019. The survey has been conducted by Dr. Ellen Field and Prof. Paul Berger from Lakehead University and Pamela Schwartzberg from Learning for a Sustainable Future, in collaboration with Leger Research Intelligence Group, and with support from SSHRC and the Canadian Teachers Federation. The survey has been completed by 4000 respondents and establishes baseline levels of understanding of climate change among teachers, teacher educators, the general public, students (12- 18 years of age) and parents from across the country.

What is Excellent Climate Change Education?

Workshop

Saturday, May 11, 2:00pm-3:00pm
Arts 214

Strands: ★ ●

Presenter: Gareth Thomson, Alberta Council for Environmental Education

We are proud to launch our new guidebook for educators, which seeks to help answer the question What is Excellent Climate Change Education? We've pulled from several lines of evidence (over 140 peer-reviewed, refereed academic articles! Practitioner best practices!) to bring you our best thinking: you'll receive the guidebook, hear a summary of our findings, then consider which of these findings is most relevant to you. When it comes to your own education programs and lessons, will peer-reviewed research suggest a course correction to how you engage learners around climate? Only you can be the judge!

Environmental and Sustainability Education Practices

Panel Presentation

Saturday, May 11, 2:00pm-3:00pm
Arts 213

Strands: ●

Early Childhood Environmental Education Practices

Presenters: Keonie Green & John Bosco Archaribasam, University of Saskatchewan

The urgent need to educate citizens on the sustainable uses of natural resources through environmental education; has been a global priority. Desirable environmental education (EE) teaches about both the natural and built environments. It allows individuals to explore environmental issues to develop deeper understandings and acquire the skills needed to make informed and responsible decisions as well as engage in problem solving to act for environment improvement. Since environmental education is so beneficial to our existence, it is only fitting that it begins in the early years to ensure continuity, lifelong learning and environmental citizenship. Early exposure to environmental education ensures building knowledge, good emotional dispositions, and multiple skills development. Early childhood environmental education (ECEE) has been addressed differently in the various parts of the world. This literature reviews practices and approaches of ECEE in Canada and other parts of the world. The question that will drive this research is: What are the current practices of EE at the early childhood level?

Environmental and Sustainability Education in Teacher Education

Presenter: Janet McVittie, University of Saskatchewan; Laura Sims, Université de St. Boniface; & Paul Elliott, Trent University

Recognizing the urgent need to educate citizens on the sustainable uses of natural resources, the protection of biodiversity, halting climate change, and sharing resources more equitably, we examine in this session how teachers are being prepared. Teachers serve many roles, and have to integrate a variety of different kinds of learners into their classrooms. Therefore, the best time to prepare them to address ESE is in their teacher preparation programs. From a survey of a variety of Canadian colleges / faculties of education, several approaches are described. However, what more can be done? We are keen to know what the audience has to suggest.

Saturday, May 11

Concurrent Sessions and Workshops #4

3:15pm-4:15pm

Spurring Climate Action Through Narratives and Visualizations

Panel Presentation

Saturday, May 11, 3:15pm-4:15pm
Arts 263

Strands: ★ ●

[View livestream at eecom.org/ecom-2019!](http://ecom.org/ecom-2019!)

Carbon Reduction Wedges: Interactive Simulations and Narratives Catalyze Climate Action

Presenter: Mckenzie Tilstra, The King's Centre for Visualization in Science

Educators will be introduced to an interactive visualization that enables investigation of carbon emissions reductions resulting from actions on energy efficiency and renewable energy. Updates to this carbon reduction wedge simulation identified in focus groups with partners working at the energy-climate nexus in Alberta will be presented. Framing the interactive visualization with narratives constructively engages learners because they can see themselves within the possible solutions. We will explore how the development of inclusive narratives for specific high school, university, and community audiences increases the impact of the carbon reduction visualization as an effective climate education resource.

Low-Carbon Economy Stories of Saskatchewan

Presenter: Margret Asmuss, Saskatchewan Environmental Society

The objective of the Low-Carbon Economy Stories of Saskatchewan project is to engage small and medium enterprises (including agricultural organizations), students, youth and indigenous communities in rural Saskatchewan in a conversation about the opportunities embedded in new, innovative low-carbon approaches to doing business. The project is based on the idea that we have to appeal to people with more than just passive information about climate change impacts. Rather, we aim to tell them personal stories about people who share their identity and who are demonstrating alternatives to carbon intensive economies and livelihoods.

Climate Action Narratives: The Hopeful Story of Carbon Reduction Opportunities

Presenters: Melanie Hoffman, Peter Mahaffy, & Mckenzie Tilstra, The King's Centre for Visualization in Science

Educators from all backgrounds will experience a powerful interactive visualization that allows learners to explore the effect of global changes in human activity on carbon emissions. The simulation empowers users to investigate the impact of a variety of actions by manipulating variables, such as renewable energy production, or vehicle fuel efficiency. To effectively engage learners with the visualization, participants will workshop storylines relevant to their specific audiences. Climate change action must be framed in positive, inclusive narratives in order to draw in, and not polarize. This workshop will further the participants' toolset for education promoting action on climate change.

Theory to Praxis of Climate Change in Indigenous Education

Panel Presentation

Saturday, May 11, 3:15pm-4:15pm
Tipi in The Bowl

Strands: ●

Presenters: Kevin Lewis, Kâniyâsihk Culture Camps-Curriculum Studies and University of Saskatchewan; Matilda Lewis and Patricia Alexander, kâ-nêyâsihk Mîkiwâhpa Cree Immersion School; &

Jody Houle, University nuhelot'jine thâyots'j nistameyimôkanak Blue Quills

The dream of having Cree Immersion Program in our community has been in the planning stages since 2000. There have been Cree Immersion pilots in our local school that aimed at early childhood education with successes. The 30-45 minute sessions did not work. There was canvassing of our communities throughout the years and they still want to keep our Indigenous languages. This panel will speak on the pedagogy, the on-going development of a Land-based program and in an immersion setting.

Sustainability Education from Religious Perspectives

Panel Presentation

Saturday, May 11, 3:15pm-4:15pm
Arts 202

Strands: ★ ●

Radically Re-Reading and Re-Studying Biblical Texts in the Anthropocene

Presenter: Cam Fraser, The United Church of Canada

An exploration of how Biblical texts which are typically read within North American Churches in anthropocentric ways that justify doctrines of discovery and domination as well as exploitative practices can be re-read in a way that challenges such attitudes, and can in fact be an animating and motivating force for people of faith to engage in activism around Climate Change. This presentation aims to emphasize the often ignored, misunderstood call to action and solidarity centred in radical understandings of the Christian Tradition.

Returning to Eden: How Deconstructing Our Foundational Story Can Guide Us to a Sustainable Future

Presenters: Josh Campbell, Regina Catholic Schools & Philip Brass, Peepeekisis First Nation

Recycling our products; reducing our consumption; inventing a technological saviour. Are these really the solutions to our planetary crisis? Or are they just Band-Aids for a deeper systemic problem? A problem that goes so deep that it lies at the very foundation of Western Civilization? In our presentation, Josh Campbell explains how a dominant interpretation of the Genesis Creation Myth has shaped our civilization project and led to our current planetary crisis. Philip Brass then articulates the connections between the systemic issues facing our world today and how traditional Indigenous knowledge may offer a blueprint for more sustainable practices.

Partnerships for Sustainability and Climate Education

Panel Presentation

Saturday, May 11, 3:15pm-4:15pm
Arts 210

Strands: ★ ● ●

Ways that Ecomuseums Preserve Natural and Cultural Heritage Through Education

Presenters: Anna Hall, Western University; Glenn Sutter, Royal SK Museum; & Adela Kincaid, University of Regina

The purpose of the presentation is to present findings from lessons from the Ecology Heritage Project delivered by the White Butte Ecomuseum. These lessons had a strong focus on natural heritage, including connectedness to the natural ecology of the area and sustainability. Lessons were focused on environment and sustainability specific to the White Butte Region, and data was collected to see if land-based learning brought any changes of perception of the natural environment to the students who participated. Lessons happened throughout three days in early May with grade four and six students.

Powerful Partnerships: Fighting Climate Change Together

Presenters: Elizabeth Wren, Toronto and Region Conservation Authority & Raysha Carmichael, Peel EcoSchools Education, Training and Outreach Division

The Region of Peel supports a suite of climate change education initiatives actioned by Toronto and Region Conservation Authority (TRCA), including the implementation of Peel Eco Schools, Watershed on Wheels, Conservation Youth Corps, Yellow Fish Road, Aquatic Plants Program and numerous Community Engagement Events. Funding allows staff to support the community as a whole, linking activities in the schools to their neighborhoods. Join our TRCA Education and Outreach team to explore the benefits of collaborating with local organizations to tackle climate change education providing deeper environmental and experiential learning opportunities for residents in the Region of Peel.

Teacher Partnerships in Environmental and Sustainability Education

Presenter: Rachel Regier, Sustainability and Education Policy Network

This presentation will summarize findings from SEPN's national research on the topic of partnerships between teachers and out of school organizations. Teachers engage with NGOs, businesses, and other experts to prepare unique and authentic environmental and sustainability education lessons. Policy offers little direction in these types of interactions, and as such teacher experiences with partners are varied. Teacher interviews and surveys from 10 school divisions in 6 provinces and territories will be summarized to offer an overview of ways these relationships unfold. Teachers and those who engage with schools will be inspired and empowered by partnership stories from across Canada.

Water and Environmental Education

Panel Presentation

Saturday, May 11, 3:15pm-4:15pm

Arts 206

Strands: ★ ●

Freshwater Climate Data Packages

Presenters: Pauline Gerrard, International Institute for Sustainable Development with other co-presenter

IISD-Experimental Lakes Area is the world's freshwater laboratory. For 50 years, IISD-ELA has been conducting whole-ecosystem experiments and Long Term Ecological Research (LTER) on boreal lakes to research human impacts and solutions for the world's freshwater. IISD-ELA's LTER has identified lakes responses to subtle changes in climate over the last 50 years. This 50 year data set provides trends for various parameters such as, the number of ice free days, temperature, precipitation, stratification, fish size, etc. We are creating data software to allow for facilitated manipulation and observation of the data for students in grade 7-12.

Dive In! Exploring Our Connection with the Ocean

Presenter: Ann Eriksson, Orca Book Publishers

The ocean is a major player in the climate change story. We rely on it for oxygen, food, climate regulation, medicines, and pleasure. *Dive In! Exploring Our Connection with the Ocean* is a non-fiction book for 9 to 12 year olds (and their adults). It clearly explains the role the ocean plays in regulating climate and how greenhouse gas pollution is altering ocean ecology to the detriment of humans and marine life alike. *Dive In!* offers practical solutions for people of all ages whether you live near the ocean or far inland.

Navigating Ocean Education on Dry Land

Presenters: Danika Strecko & Catriona Wilson, Ocean Wise

Mobile and Online Learning education staff from Ocean Wise will lead a discussion on activating land-locked communities to participate in ocean conservation. Through innovative digital, in person, and service learning initiatives guided by the seven Ocean Literacy principles, discover how connecting with diverse non-coastal cultures can provide opportunities for protecting our oceans.

Research Approaches to Environmental Education

Panel Presentation

Saturday, May 11, 3:15pm-4:15pm

Arts 212

Strands: ● ●

Songwriting for Nature: Increasing Nature Connection and Well-Being through Music

Presenters: Glenn Sutter, Royal Saskatchewan Museum & Katherine Arbutnot Campion College, University of Regina

We examined whether songwriting in a natural setting affects nature connectedness, emotional well-being, and creativity. In one study, high school students took part in songwriting workshops either in their school or at a national conservation area. The natural setting uniquely increased nature connection, while both settings improved mood and creativity. Adult songwriting retreats in the same area produced similar effects and, compared to a science-based field course, the nature connection effects were entirely attributable to nature contact. This implies that both musical creativity and outdoor education improve well-being, while outdoor education also increases nature connectedness, and songwriting also increases creativity.

Posthumanist Pedagogies: Attuning Within a Transdisciplinary Environmental Education*Presenters: Kathryn Riley & Peta White, Deakin University*

In these Anthropocene times humans are both vulnerable through the effects of socio-ecological disarray and responsible for attending to past, present, and future socio-ecological injustices and threats. Activating responsibility in scaffolding learning for a new future, through storytelling and poetry this presentation explores how an outdoor educator and science educator makes sense of transdisciplinary pursuits of environmental education and pedagogies of attuning-with. Through the crossing and expanding of discreet subject boundaries and grounded, lived, embodied, and embedded teaching and learning practices, we demonstrate a mutually (re)configuring with the world, revealing sense-making as relationally co-constituted, yet differentiated, within shared futures.

Emotions and Environmental Education Approaches**Panel Presentation**

Saturday, May 11, 3:15pm-4:15pm
Arts 214

Strands: ★ ●

Connecting Place- Based Community Focused Learning to Trauma*Presenter: Nancy Barr, Saskatoon Public School Division*

This session would give a quick overview on how the brain and body can work together to regulate students/people who have experienced or live in trauma situations. It will show the connections between building community and learning in place with solid teaching strategies that can provide a safe place and space for effected students/people to learn and grow.

Building Environmental Empathy with Character!*Presenters: Kari Riddell & Amanda Ring, Clean Foundation*

Join us for a fun hands-on and hands-up opportunity to explore character development as a tool for early environmental education. Participants will discover how bringing characters to life can break down barriers, reduce anxiety, help students of different learning strategies, and create and strengthen an empathetic connection with the natural world. We will discuss the rationale and strategies for using hope to teach about climate change, and practice adding emotion and personality to bring the classroom to life through a series of smile-inducing activities and a few special faux-furry guests!

Empathy or Apathy: Making High School Climate Education Matter*Presenter: Kristen Simonson, Chinook School Division*

As the United Nations have given us the most disturbing report yet on mitigating climate change, science educators now have a monumental task in their classrooms; to bring awareness, to create purpose, to teach the science, and to highlight solutions....all while fighting a rising tide of pseudoscience, political maneuvering, and an increasing need for young people to disengage from their screens. We need the engagement of young people, and yet young people have more anxiety, depression, and less scientific knowledge than ever before. Science teachers have never been so important as we strive to make this matter for young people.

Higher Education and Sustainable Development around the World

Workshop

Saturday, May 11, 3:15pm-4:15pm

Arts 213

Strands: ●

Presenter: Stefanie Mallow, International Association of Universities

In all corners of the globe, higher education is engaging with sustainable development. Thanks to the United Nations Sustainable Development Goals (SDGs) and Agenda 2030, there is today a joint understanding of the most pressing needs of our times. Nevertheless, universities are embedded in the local culture of the society they are based in, which means they are tackling sustainable development through different ways. The workshop will show what educators in HE are doing around the world and how connections across continents can scale-up initiatives on all levels.

Saturday, May 11

Concurrent Sessions and Workshops #5

4:30pm-5:30pm

Fossil Fuels and Climate Action

Panel Presentation

Saturday, May 11, 4:30pm-5:30pm

Arts 263

Strands: ★ ●

[View livestream at eecom.org/eecom-2019!](http://eecom.org/eecom-2019!)

Adolescent Thinking Around Climate Change and Economic Uncertainty in BC

Presenter: Paul Orlowski, University of Saskatchewan

Climate change poses an existential threat to life on Earth as we know it. The wealthy few who benefit most from fossil fuels have undermined science and scientists, while obscuring the issues through (conservative) politicians falsely presenting climate mediation as a threat to the economy. As a result, misinformation and confusion about climate change abounds in the public sphere. Individual interviews with senior high school students were undertaken in Nelson, BC. The responses diverged significantly according to site, and were mostly influenced by political ideology. Implications for teachers and curriculum developers will be addressed.

Petro-Pedagogy: Fossil Fuel Interests and the Obstruction of Climate Justice

Presenters: Emily Eaton & Nicholas Day, University of Regina

By analysing 29 interviews with teachers, out-of-classroom educational workers and organizations engaged with public education in Saskatchewan we show how teaching practices and resources work to centre, legitimize, and entrench a set of beliefs relating to climate change, energy, and environmentalism that align with the interests of fossil fuel industry actors. We argue that these pedagogical practices promote student subjectivities consistent with neoliberal environmentalism centred on individual actions that insulate fossil fuel industries from criticism and foreclose the possibility of transitioning off fossil fuels. They dissuade young people from questioning or understanding the role of corporate power in climate crisis.

Southeast Saskatchewan Oilfield Workers' Views on Climate Change

Presenter: Shelby Adams, Royal Roads University

I have recently completed a thesis on Southeast Saskatchewan oilfield workers' views about environmental issues, climate change, and the future and role of energy in Saskatchewan and Canada. My research has three main findings:

1. Oilfield workers in the Southeast area have robust sense-of-place notions that result in feelings of perceived environmental stewardship and protection.
2. Participants are conflicted between climate skepticism and the acceptance of scientific consensus of anthropogenic climate change.
3. Contrary to popular belief, oilfield workers generally accept the inevitable phasing-out of fossil fuels and transition to more sustainable energy practices.

Decolonization, Empowerment, and Learning Through Community Gardens

Panel Presentation

Saturday, May 11, 4:30pm-5:30pm

Tipi in The Bowl

Strands: ● ●

Decolonization, Reconciliation, Immigrant women's empowerment through a community garden plot

Presenter: Jebunnessa Chapola, University of Saskatchewan

This paper is based on an auto-ethnographic reflection, which shows how participating in community gardening can support social and environmental learning about reconciliation, decolonization, and immigrant women's empowerment in meaningful and synergistic ways. Through my auto-ethnographic reflections, I show how community gardening provides a critical context for navigating the challenges and processes of diasporic identity construction, conditioning women's empowerment in resistance to inequitable community politics and patriarchal social structures. As a diasporic woman, I feel it is important for me to learn about decolonization and reconciliation. This paper attempts to transmit what I have learned about building transnational solidarities using

My Learning Stories from a Community Garden

Presenter: Prokriti Datta, Grade 5 Student

I am going to tell you my stories about my learning from a community garden.

My Learning from a Community Garden

Presenter: Prarthona Datta, Grade 6 Student

I am a Grade Six student at Brunskill School. I am going to share my social and environmental learning experiences from a community garden. My learning experiences include many of my direct learning from soil, various insects and plants, gardener friends, and parents. I want to tell you about this community garden because this land helped me to learn who I am today and what I want to be. I want more people to learn about the land and all the hidden learning that are at the community garden.

Mindfulness Now! Nature Connectedness for the Busy Corporate World

Workshop

Saturday, May 11, 4:30pm-5:30pm

Arts 202

Strands: ●

Presenter: Barret Miller, FortWhyte Alive and EECOM

The facilitator will lead the group through a meditation exercise isolating each of the five senses to experience the natural environment deeply. The experience of each sense is discussed and integrated as a group. This exercise leads to a heightened awareness of the natural world, which can be used to lead to individual and corporate actions benefiting the local and global environment.

Leading Students Outside and the Outdoor Council of Canada

Workshop

Saturday, May 11, 4:30pm-5:30pm

Arts 210

Strands: ● ●

Presenter: Nick Townley, TREK Outdoor Education Program, EEPSA, & Outdoor Council of Canada

Using hands on activities from the nationally recognized Outdoor Council of Canada's Field Leader course, participants will share best practices. The group will reflect on motivations for leading groups outdoors, discover more about what makes an effective outdoor leader and how to plan safe outdoor events.

Educating Students About Water Quality and Quantity and Climate Change

Workshop

Saturday, May 11, 4:30pm-5:30pm

Arts 206

Strands: ★ ●

Presenters: Nicole Hancock, Safe Drinking Water Foundation & Tim Molnar, Safe Drinking Water Foundation and University of Saskatchewan

In this workshop, Nicole Hancock [Executive Director, Safe Drinking Water Foundation (SDWF)] and Dr. Tim Molnar (Board Member, SDWF and Assistant Professor of Curriculum Studies, University of Saskatchewan) will discuss how climate change is affecting and will affect water quality and water quantity. They will explain SDWF's Operation Water Drop program for which there is also an Operation Water Drop Test Results Submission Website that enables teachers and students to report their results. The hope is that this website will collect a lot of data that can then be analyzed to discover trends and issues.

Making the Case for Grasslands and Forests

Panel Presentation

Saturday, May 11, 4:30pm-5:30pm
Arts 212

Strands: ★ ●

Planting Trees, Afforestation: The Solution to Earth's Environmental Dilemma

Presenter: Julia Adamson, Stewards of the Richard St. Barbe Baker Afforestation Area

Woodlands absorb CO₂, mitigating global warming. Saskatoon is a unique pioneer afforesting 660 acres in 1972. Forests influence local weather patterns, creating individualized micro-climates. Carbon sequestration by afforestation is a rich reward, additionally the health of the eco-system, the economy and the community also benefit. When the trees go, the rain goes, the climate deteriorates, the water table sinks, the land erodes and desert conditions soon appear...if the earth loses one-third of its green mantle of trees, it will die. ...Planting and growing increasing quantities of trees is the scientific solution to Earth's environmental dilemma. ~Richard St. Barbe Baker

Mitigating Climate Change Through Food Forestry

Presenter: Nicola Thomas, Grand River Food Forestry

This case study explores how grassroots community based organizations can create thriving ecosystems through edible landscapes and trails in urban settings, to create a long-term plan for sustainable climate change through regional, city and community partnerships. We accomplish this through permaculture, sustainable polyculture and biomimicry principles. Food forestry provides shade and humidity, absorbs carbon dioxide, protects watersheds, increases soil fertility and provides food, shelter as well as habitat for many pollinator species. Our permaculture practices are regenerative and restorative increasing soil fertility. 7000sq' have been successfully transformed to offset climate change in 5 years.

Saskatchewan Native Prairie Inventory, An Estimation of Remaining Grasslands

Presenter: Joanne Marchand & Teal Fisher, GIS Instructor, Natural Resource Technology & GIS Programs, Saskatchewan Polytechnic

A power point presentation and question period would allow us to explain the purpose and partnership (with Environment Canada) that initiated this project. The power point will highlight the beauty and significance of our native grasslands to the diversity our healthy ecosystem demands. We would illustrate the amount and areas of remaining native grasslands within the Prairie Ecozone in Saskatchewan with maps produced from our data sets obtained during 2016-2017, hopefully stirring an interest and concern for our imperiled prairie grasslands. The research methods and results would be explained, using the power point. A discussion of past and current techniques & technologies for manual and digital estimation of grassland habitats would follow. Joanne Marchand would address any issues pertaining to the vegetation component and Teal Fisher would address all issues pertaining to the GIS and maps.

Process Considerations for Sustainability Uptake in Education

Panel Presentation

Saturday, May 11, 4:30pm-5:30pm
Arts 214

Strands: ●

Waiting for Godot: Climate Change and Leadership in Higher Education

Presenter: Paul Kolenick, Yorkville University

In Samuel Beckett's (1956) monumental play, *Waiting for Godot*, Vladimir and Estragon spend their entire time waiting for Godot, who does not appear. One might imagine a parallel with sustainability in higher education, particularly leadership for sustainability in higher education with respect to climate change and its increasing widespread global implications. The question is raised as to whether sustainability leadership in higher education as it relates to climate change is necessarily a top-level administrative responsibility. Alternatively, the key to sustainability leadership in higher education is in the "institutional middle," suggestive of leadership that is horizontal rather than vertical.

Education for Eco-civilization: A Whiteheadian Perspective

Presenter: Robert Regnier, University of Saskatchewan

This presentation recommends the idea of learning as self-creation of value formulated within the process philosophy of Alfred North Whitehead's metaphysics of experience presented as physical feeling, conceptual feeling, propositional feeling, and intellectual feeling. Through a legacy of interpretations of Whitehead's work on education, little of it takes up his metaphysics in relation to education; and no written work explicitly relates such a metaphysical analysis to teaching and learning practices toward achieving eco-civilization. This work builds from the metaphysical insights advanced in my previous article "Toward Eco-Civilization through Learning as Valuing: A Proposal for Whitehead Based Creative in China's Schools."

Using Outdoor Learning to Decolonize Education

Panel Presentation

Saturday, May 11, 4:30pm-5:30pm
Arts 213

Strands: ● ●

Presenters: Chris Clark, University of Saskatchewan; Charlie Conner, Chief Napew Memorial School in Big Island Lake Cree Nation; & Joe LaChance, Ed Big Island Lake Cree Nation

Outdoor learning provides an opportunity for students to become reconnected with the land and engaged in learning which is an important step towards the decolonization of education. We will be sharing our personal experiences as teachers of an on-reserve land-based program and an urban inner-city outdoor education program that both use outdoor learning as the foundation for the learning success of students. We will share starting points that can be used by educators in their own practice. There will be an opportunity for you to discuss how outdoor learning could look in your context.

Sunday, May 12

Concurrent Sessions and Workshops #6

9:30am-10:30am

Local Climate Change Learning Resources

Workshop

Sunday, May 12, 9:30am-10:30am
Arts 263

Strands: ★ ●

Presenter: Garth Pickard, University of Regina & Learning for a Sustainable Future

This session focuses on how educators can engage the local context for learning about climate change. We will review current resources that support teachers in practicing local and transformative approaches to climate change learning, specifically focusing on Connecting the Dots, Teaching Teens about Climate Change, the Climate Change Atlas of Canada, and Resources for Rethinking.

Natural Curiosity: The Importance of Indigenous Perspectives in Climate Education

Workshop

Sunday, May 12, 9:30am-10:30am
Tipi in The Bowl

Strands: ★ ●

Presenter: Haley Higdon, Rosa Na, & Brianna Olson-Pitawanakwat, Natural Curiosity

This workshop will look at how the Natural Curiosity resource offers educators a powerful way to engage students in environmental and climate change education. In this interactive session, educators will participate in a professional inquiry process through a group knowledge building circle where we will discuss how Indigenous perspectives inform and enrich climate change education and action in all learning environments. Participants will consolidate their learning from the knowledge building experience through the four-branch pedagogy of Natural Curiosity and Indigenous lenses on each branch, and through stories from educators across Turtle Island who are exemplifying this approach in their practice.

Clean Schools' Place-based and Solution-driven STEM Workshops

Workshop

Sunday, May 12, 9:30am-10:30am
Arts 210

Strands: ★ ●

Presenters: Amanda Ring, Clean Foundation & Devin Radcliffe, Clean Foundation

Clean Schools are curriculum-aligned hands-on STEM workshops for middle school students on various environmental topics. In this workshop, we will explore the pedagogy, methods, and materials used in these participatory and solutions-based programs and their accompanying teacher resources. Participants can try experiments used in the programs, while considering the benefits of place-based education. We will discuss how to foster student engagement in environmental issues through a local and personal context and develop action projects that create connections between students, families, classes, and communities. Throughout, we will focus on maintaining a positive perspective, teaching through hope, empathy, and empowerment.

'Leap into Action' - An Educator's Guide to Environmental Action

Workshop

Sunday, May 12, 9:30am-10:30am
Arts 206

Strands: ●

Presenter: Gareth Thomson, Alberta Council for Environmental Education

In this hands-on workshop, we'll help you identify links between provincial curriculum and action, and then do several activities from 'Leap into Action,' a free teacher activity guide that you'll receive in this workshop. This guide was created for all educators, teachers, and agency professionals - and is full of lesson plans to help you prepare, inspire and support students in conducting age-appropriate environmental action projects, including skill-building activities and tools, and inspirational real-life case studies.

Climate Change Mitigation in the Classroom

Panel Presentation

Sunday, May 12, 9:30am-10:30am
Arts 212

Strands: ★ ●

Implementing Climate Change Education Projects in New Brunswick Schools

Presenter: Geoff MacDonald, The Gaia Project

In 2016, New Brunswick released a Climate Change Action Plan entitled Transitioning to a low-carbon economy which includes an objective to incorporate climate change into education at all levels, including experiential learning and connecting learners with climate change initiatives in their local communities. Local leaders in sustainability and energy education, The Gaia Project, received provincial funding to develop a Climate Change Education Plan to successfully introduce this content at age-appropriate levels while providing the necessary supports required for teachers to improve their practice. Through his presentation, Geoff MacDonald (M.Ed, B.Ed, B.Sc), will share the NB Climate Change Education Plan.

Human Causes of Climate Change

Presenter: Bernadette Slager, The Saskatchewan Forestry Association

In this session the participants will do some activities that are made for high school students to understand more about climate change that is happening. They will be introduced to a website where they can get more resources for student learning. Some material will counteract the hopelessness we often hear on the news.

A Changing Atmosphere in Canada: Teaching & Learning About Climate Change

Panel Presentation

Sunday, May 12, 9:30am-10:30am
Arts 214

Strands: ★ ● ●

Presenter: Adam Young, EECOM Chair; Shannon Harding, Clean Nova Scotia; Maureen Jack- LaCroix, Be the Change Earth Alliance; & Shane Patey, Canada Science & Technology Museum

This national roundtable will be a unique intergenerational discussion with speakers who will provide fresh ideas and vision for tackling the greatest threat to modern life: climate change. From practitioner hands-on teacher resources, to trends and shifts in educational policy to support climate change education in schools and school districts, the speakers will explore the current trajectory of this field within the natural and social sciences, and the need to incorporate this topic across all subject areas. Each speaker will start with a brief introduction and outline what they have been working on in this field, exploring some guiding questions about the state of climate change education in Canada, and then open the floor to attendees. Connecting early childhood, K-12, college/university and teacher education, it will highlight how we ensure these discussions are inclusive and collaborative, acknowledging the need for climate change adaptation and mitigation education within our curriculum and pedagogy.

Planning to Overcome Perceived Barriers: Tailoring ESE for Diverse Learners

Workshop

Sunday, May 12, 9:30am-10:30am
Arts 213

Strands: ●

Presenters: Laura Sims & Marie-Élaine Desmarais, Université de St. Boniface

Enabling learning experiences that integrate environmental and sustainability education (ESE) approaches and that are appropriate and accessible for learners with diverse needs can seem daunting. The purpose of this workshop is to develop participants' abilities to plan inclusive experiences whilst using ESE approaches to facilitate learning. Guided by universal design for learning principles, the reflective process will occur by way of a gentle nature walk with participants encountering different "stations" along the way representing challenges-to-learning that students often face (e.g., intellectual, physical, learning disabilities).

Sunday, May 12

Concurrent Sessions and Workshops #7

10:45am-11:45am

Birds in a Changing Climate: How Can We Help?

Workshop

Sunday, May 12, 10:45am-11:45am

Arts 263

Strands: ★ ●

Presenters: Liza Barney & LeeAnn Latremouille, Bird Studies Canada

Birds play a critical role in our ecosystems, and are important indicators of changes in the environment. Birds also offer exciting opportunities to connect students to the natural world. The first part of this workshop will highlight the state of Canada's birds, and how a changing climate is contributing to declining populations. The second part of this session will introduce activities to engage students in local bird life, participate in entry-level Citizen Science programs and contribute to bird conservation at school and home.

Pimohtēwin - Walking Softly with the Earth

Workshop

Sunday, May 12, 10:45am-11:45am

Tipi in The Bowl

Strands: ★ ●

Presenter: Marcia Klein, Sask Rivers Public School Division & Joseph Naytowhow

Renew your relations with earth, water, air, fire by walking softly with the Earth near the South Saskatchewan River. Reconnect with Wākohtowin, our relations, on a walk with flute music, bird songs, ethnobotany, stories, beauty and a chance to pause and breath at your sit spot. Consider your Home Place. Honouring the Earth will remind us of the many reasons we as educators need to empower learners to feel, know, and take action for the better good. We teach who we are (Parker J. Palmer).

Change is not a Choice... It is an Opportunity of a Lifetime

Workshop

Sunday, May 12, 10:45am-11:45am

Arts 202

Strands: ● ●

Presenter: Garth Pickard, Learning for a Sustainable Future & University of Regina

For centuries formal education has disenfranchised most individuals by limiting their understanding of the integral nature of all that is living and inanimate. It is apparent that people and the formal educational experiences that binds them, contribute more to the economic, social, cultural, and environmental problems our planet faces, than it does otherwise. Either we change the way we learn or we continue on this destructive educational journey. The only purpose of formal education for the 21st century is to assist individuals gain the knowledge and develop the skills to sustain the well-being, of all, over the long term.

The Pathway to Stewardship and Kinship

Workshop

Sunday, May 12, 10:45am-11:45am
Arts 210

Strands: ● ●

Presenters: Paul Elliot, Trent University; Jacob Rodenburg, Camp Kawartha; & Cathy Dueck, Pathway to Stewardship and Kinship

The Pathway to Stewardship and Kinship is a framework for sustainability that aims to bring together schools, families and local communities in a collaboration to ensure that young people growing up in Peterborough County, Ontario have the experiences and support necessary to promote care for the environment and each other. It identifies age-appropriate landmark experiences from birth to Grade 12. The landmarks are based upon research evidence and interviews conducted with eighty community members to understand how their childhood experiences influenced their dedication to the environment. The first phase is being trialed with early year educators and elementary schools.

Exploring the Hidden World Around you with Origami Microscopes

Workshop

Sunday, May 12, 10:45am-11:45am
Arts 206

Strands: ●

Presenter: Paul Stinson, Sun West School Division

Foldscopes are an inexpensive, cardboard origami microscope, providing magnification at 140x. In addition to being much less expensive than a traditional classroom microscope, they are extremely portable and durable and provide hands on learning to those who might otherwise not have such opportunities. The simple yet effective technology (a glass bead as a magnifier) allows connections to biology/life sciences (cell studies, microorganisms), physics/optics, as well as engineering/design. I used them with middle years home schoolers, but could be readily used in classrooms from Grade 5-12.

#185daysofwalks

Workshop

Sunday, May 12, 10:45am-11:45am
Arts 212

Strands: ●

Presenter: AnaBela Ferreira Luis, Seven Oaks School Division (Riverbend School)

What happens when you take 19 1st and 2nd grade children outdoors for a walk, everyday, despite the other time commitments, despite the other priorities, and despite the weather? From the rainy days of autumn, to the days of -40C/F of winter that came complete with wind and snow, to the days of 30C (86F) of spring and summer, let me share our #185daysofwalks journey with you. Let me show you how we infused all areas of our grade 1 and 2 curriculum into our experiences, and how my students became true advocates for the outdoors.

Student Action Matters: The Value of Experience in Helping Nature

Workshop

Sunday, May 12, 10:45am-11:45am
Arts 214

Strands: ★ ●

Presenter: Kathy Nguyen & Sarah Winterton, World Wildlife Fund (WWF) Canada

WWF's Living Planet @School provides diverse and accessible hands-on actions for K-12 educators, preparing students for a life-long journey with sustainability. We highlight successful make-it-your-own activities that enhance noticing nature and climate change for youth during the school experience, drawing on examples from schools, educators, and students who inspire action. Workshop participants will create an action plan for the 2019-2020 schoolyear, connecting their students to action for nature and sustainability. Using WWF's online interface, educators register and record their students' results alongside schools nationwide. Together, we can demonstrate the positive impact youth contribute to building a more sustainable Canada.

Inquiry and Citizen Science Approaches in Urban Education

Panel Presentation

Sunday, May 12, 10:45am-11:45am
Arts 213

Strands: ★ ● ●

Conserving Natural Environments Through Citizen Science

Presenter: Kenton Lysak, Meewasin Valley Authority

Citizen science can be a valuable tool, both in conserving natural areas and in generating greater public awareness around complex environmental issues. The Meewasin Valley Authority is a conservation agency that has used numerous citizen science programs to monitor the ecological integrity of our natural areas, understand the impact of climate change within our conservation sites, and in determining the complex interactions between species within the South Saskatchewan River Valley. Both the challenges and successes of these programs will be discussed as well as overall considerations to account for when designing future citizen science projects.

Urban Place-Based Pedagogies and Their Role in Native Prairie Education

Presenter: John Paul Wasan, High School Student and Caring For Our Watersheds Saskatchewan

The development of native prairie restoration and education sites can serve as an excellent opportunity to implement native plant education, inquiry-based education and place-based learning programming. Participants will explore the successes and challenges of urban, place-based native prairie education, and its importance for our future. We will examine the questions of: How can we bring ecological place-based learning (PBL) onto the school ground? What benefits might be associated with urban environmental education spaces? How can we actually create and benefit from these spaces?

Biodiversity Education for Fostering Action on Climate Change

Presenters: Polly Knowlton Cockett, Grassroutes Ethnoecological Association

Just what might a small patch of urban prairie in northwest Calgary offer the wider community on understanding biodiversity and climate change? Whispering Woods, a small fragment of native grassland, is a perfect setting for engaging the public in citizen science and stewardship, while learning about interrelationships within ecosystems and their connectedness to global systems. Members of the City of Calgary BiodiverCity Advisory Committee, University of Calgary students in women's studies and social work, school children, and neighbours actively gather here, and aspects of their work will be presented, highlighting the socioeconomic benefits and resiliency of a healthy, biodiverse landscape.