

## BIOGRAPHIES OF PRESENTERS AND DETAILS ABOUT SUBJECT MATTER

### Educating Beyond Fear and Confusion about Climate Change: Developing Community Resilience

We live at a time where people are subjected to massive amounts of information about climate change, information presented by a diversity of sources and organizations and through a wide spectrum of media. Almost daily there are reports of climate-related problems and accounts of extreme, climate-related disasters. International organizations make regular reports about the latest research on climate changes, announcements often accompanied by dire predictions about future trends and the global impacts of continuing climate change. It is not surprising that people across a spectrum of ages and experiences often report feeling discouraged, fearful and powerless in the face of such a complex and wide-ranging global process. While many reports emphasize the long term, global aspects of climate change, in fact local communities are at the scale where most people will directly experience the effects of climate change and be challenged to take actions to either mitigate its effects or adapt and respond to climate related events.

In my view local communities are critical contexts in which to address feelings of pessimism and powerlessness, and where effective actions and innovations can be fostered in the face of the effects of changing climate. It is not possible for everyone to become an expert in the processes that drive climate change nor is it realistic to expect, or demand, that they make immediate and comprehensive changes to their life-styles and patterns of behaviour. However, at personal and local scales it is possible to make steps toward adaptation and mitigation of climate change. In this session it is my hope to provide some guidance to teachers as to the roles they and their students can play in communicating about climate changes and in supporting the development of resilient communities.

*Presented by Dr Milton McClaren*



*Milton McClaren is an active Emeritus Professor of Education in the Faculty of Education at Simon Fraser University where he teaches in the EcoEd MA program and is a Cohort Supervisor in the Doctoral Program in Education (Ed.D.) in which his students are senior administrators in the BC K-12 and post-secondary education systems, or are involved in the environment, justice, health care, and non-governmental agency sectors. He is an Adjunct faculty member in the School of Environment and Sustainability at Royal Roads University where he teaches and supervises MA students in the Environmental Education and Communications program.*

*Milt was involved in the development of the environmental education programs at both SFU and RRU and is a recipient of the B.C. Minister's Environment Award, the Canadian EECOM Award, the Canadian Wildlife Federation's Certificate of Merit, and the Taft Campus Award from the University of Northern Illinois for his work in the field of environmental education. He was a Fellow at the Aspen Global Change Institute, a forum supported by NASA which brought together teachers from Canada and the US with leading scientists in the fields of global change. He has written and developed curriculum in the area of*

*Global Climate Change and received an Award of Recognition from the BC School Superintendents Association and a Certificate of Achievement from the Canadian Association of School Administrators for his work in professional education. He is a holder of the Maxwell Cameron Medal in Education of the BC Teachers Federation.*

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### **Indigenous perspectives on - Bringing Salmon Back to Life**

*Presented by Dr Bill Cohen:*

#### **Title–Bringing Salmon Back to Life**



**Bill Cohen**

*Bill Cohen is from the Okanagan Nation with extensive kinship ties throughout BC and Washington. He specializes in the areas of Indigenous knowledge, research, education, and transforming pedagogy. For over twenty-five years, he has engaged in community driven, transforming projects, as parent, volunteer, advisor, facilitator, and director. He is an educator, artist, story-teller and author. The focus of Bill's continuing research is to identify, understand and theorise the transforming potential of Indigenous and Okanagan knowledge and pedagogy through organic language and cultural knowledge revitalization. As an educator, he has organized numerous community, school, arts, language, literacy and numeracy projects involving elders, fluent speakers, parents and children. He lives in Nkmaplq̓s, Okanagan territory, with his wife Natalie and children Mary-Rose, Emma-Jane, Willy, Dempsey and Devon.*

#### **Academic Credentials:**

Creative Writing, En'owkin Centre; Bachelor of Arts and Science with Distinction (U Lethbridge); Master of Education: Administrative Leadership First Nations Focus (SFU); Education Doctorate: Policy and Leadership (UBC).

#### **Sample Publications:**

- Cohen, B., and Chambers, N. (2013). "Emerging From the Whiteout: Colonization, Assimilation, Historical Erasure, and Okanagan Syilx Resistance and Transforming Praxis in the Okanagan Valley." In *Hinterland of Whiteness: White Fantasies in the Okanagan Valley, British Columbia.*, (Eds.,) Aguilar, L., Berg, L., and Keyes, D. (Submitted). UBC Press: Vancouver
- Cohen, B. (2001) "Spider's Web: Creativity and Survival in Dynamic Balance" *Canadian Journal of Native Education*. Vol. 24, 140-148.
- Illustrator, (2013) *The Moon Speaks Cree* by Larry Loyie; (1997)*Kwulusuwut II* by Ellen White; (1995) *Just A Walk* by Jordan Wheeler, Theytus Books: Penticton BC.

- Editor, (1998) *mayx twixmntm tl q'sapi lats k'ulmstm i snklc'askaxa (stories and images about what the horse has done for us): an illustrated history of okanagan ranching and rodeo*. Theytus Books: Penticton BC.

#### Recommended Reads:

- *Stones and Switches* by Lorne Simon
- Kou Skelowh-kwu Sqilxw/*We Are the People: A Trilogy of Okanagan Legends* by Okanagan Elders
- *Thinking in Indian: A John Mohawk Reader* edited by Jose Barreiro
- *Releasing the Imagination* by Maxine Greene
- *Decolonizing Methodologies: Research and Indigenous Peoples 2<sup>nd</sup> edition* by Linda Tuhiwai Smith
- *Heart of Darkness* by Joseph Conrad
- *Pedagogy of the Oppressed* by Paulo Freire
- *Ecological Literacy: Educating Our Children for a Sustainable World* edited by Michael Stone and Zenobia Barlow
- *George's Marvellous Medicine* by Roald Dahl

#### Community Service:

First Peoples' Culture Committee, Board Member and Chair of Governance Committee . . .

#### What Informs My Teaching at Okanagan College:

In Okanagan traditional stories, Coyote, with vast creative mind power and ability to transform monsters who threaten our children, often forgets he is part of a larger ecological and creative web and is destroyed. Fox always comes along and carefully gathers the bits of Coyote, and breathes Coyote back to life. I position myself epistemologically as Fox who gathers up the bits from past and current knowledge, ideas, practices, attitudes and beliefs for new understanding and creative potential. It is a challenge and a responsibility to engage with students as co-learners and collaboratively defuse intolerance, practice and embody pluralism, respect, and diversity and imagine and realize new sustaining relationships for coming generations.

#### **Salmon Study – The Newly Revised BC Curriculum**

Harmonizing the study of salmon with the new curriculum, emphasizing place based learning, competency based learning and inquiry learning.



*Presented by Dr Nan Stevens:*

**Dr. Nan Stevens**

Assistant Professor, School of Education

Thompson Rivers University Kamloops, BC

*Nan is currently a teacher educator at Thompson Rivers University (TRU), where she has worked for 18 years preparing emerging teachers for the modern classroom. Nan's teaching approach combines interdisciplinary and place-based pedagogy. Place-based education (PBE) is an emerging term used in teacher education and educational literature to describe a model of teaching and learning that assists in bringing the community into the classroom and the classroom into the community (O'Connor, 2016). Place-based education focuses on the land and the environment as the connection to self in relation to the world, enabling learners to personalize their learning experiences. PBE is situated in the DO of the BC curriculum's KUD. It is incumbent upon teachers to emphasize the DO in their roles as stewards of the environment and to engage their students in the same. Content and learning objectives actualized by doing in the place and space of the natural environment ensures that learners are brought meaning to their understanding, beliefs, and values.*

*In collaboration with a number of TRU Teacher Candidates, Nan created lessons to help make the Sea to Stream materials more congruent with the revised B.C. Curriculum to include Indigenous ways of knowing, place-based content, and environmental stewardship.*

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## **Journaling**

Curious about how to use journals, thought books or notebooks in natural and community environments? This isn't about drawing perfect flowers but an overview of how can we support students to express their wonderings, thinking and understanding of environmental experiences. But we might sketch something! The focus is on questions/curiosities that children commonly express about salmon and how to capture learning in place-based environments. Bring a phone to capture book titles, a willingness to engage in questions/shared thinking and something to write in.



*Presented by David Barnum:*

*David is a Faculty Advisor with the Okanagan School of Education (UBCO), is passionate about reflective thinking through journaling and has presented a TED Ed about learning in the community. Previously, he mentored and taught in SFU's Nature-Based/Experiential Learning Graduate Diploma in Education, trained with the Beetles Project (<http://beetlesproject.org/>) and has authored many*

*science education resources.*

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## **OUTDOOR FIELD STUDIES**

### **Watershed Model**

This interactive fully functioning mini-watershed diorama will follow two Chinook salmon up-stream to their spawning grounds, discussing what obstacles and dangers they may encounter along the way. This demonstration is very popular with teachers as it clearly demonstrates what a watershed is and stimulates student conversations to identify and visualize impacts on salmon. Often we see 'the light' go on or deeper learning as students experience the journey of migrating salmon in a playful way. Ultimately, students learn how we can preserve the natural integrity of a watershed and the many different challenges faced by the returning salmon.

*Presented by Molly Cooperman:*

*Molly is a Wild BC Facilitator and has extensive experience in working with youth and teaching environmental ethics. She serves on The Adams River Salmon Society board of directors. Molly grew up in the Shuswap and feels a connection to this place and especially salmon. Her background is in biology and environmental studies as well as a recent education degree. Molly has worked several seasons at Kingfisher and is always eager to share her knowledge and experience as well as learn more with each visit.*

### **Aquatic Invertebrate Monitoring (Bug Soup)**

This station will take you on an underwater adventure learning how to identify different aquatic invertebrate species through hands-on bug-hunting. You will be taught about the importance of these bugs as pollution indicators and their relationship to salmon.

*Presented by Tiffani Furlong:*

*Tiffani is a student at Thompson Rivers University completing her final semester of the Natural Resource Science Degree. She has worked at the Kingfisher Interpretive Centre for two years as an outdoor environmental interpreter, teaching local school children about local ecology and salmon through interactive, experiential learning.*

### **Bits about birds**

Have you ever wished you knew just a little bit more about birds in order to deepen discussions with your students? Or that you had that one interesting fact at the right time when observing birds while on a field trip? In this workshop, you'll find out that little bit more about our local birds, such as migration tidbits, links between different birds and habitats, facts about those feathers your students keep on finding and an intro to the why's and when's of birds' songs and calls. You'll also find out how birds interact with salmon in the Shuswap while having time to get some of your own bird questions answered.

*Presented by Geoff Styles:*

*Geoff is a Teacher at South Canoe Outdoor School. One of his passions is Birds. He has a wonderful way of explaining about birds their structure and behaviour so that it is interesting and memorable.*

### **Indigenous traditional fishing methods**

*Presented by Neil Brookes*

*Neil is the Education Coordinator in charge of running the Stream to Sea Program in the North Okanagan/Shuswap. He has over 30 years experience running the program and providing place-based learning to thousands of local school children covering many topics including; salmon, watershed health, aquatic invertebrate monitoring and Indigenous traditional life-ways and fishing, to name a few. His years of experience were recognized in 2011 where he was presented with the Salmon Hero award from the Fraser Salmon and Watersheds Program and once again in 2014 where he received the B.C. Interior Stewardship Award for Ecosystems Excellence.*

### **Indigenous Story Telling (To Be Confirmed [TBC])**

### **The Interior Cedar Hemlock Rainforest Walk**

Combination of sensory based experience, latest research about forest ecosystems and how they communicate as complex adaptive systems, ethnobotany and personal experiences.

*Presented by Barb Dutot:*

*Barb DuTot is an Interpreter and Director with the Kingfisher Interpretive Centre as well as operating her own business "Wild Roots Herbal Learning Centre" where she teaches bio regional herbalism.*

### **Connecting to Place through Story**

This workshop is about sharing the knowledge of a specific place through story. This is not a workshop about how to tell stories, but rather how to weave a narrative through the life sciences and social sciences to engage kids - helping them connect to the history of the place and become part of the unfolding narrative. Ceren will lead a guided hike for 20 minutes and take 10 minutes to discuss some of the techniques used.

*Presented by Ceren Caner:*

*Ceren is a Teacher at South Canoe Outdoor School and instrumental in implementing outdoor education initiatives in the district.*

### **Best Practices for Primary Outdoor Education**

This workshop is focused on using Place to allow students to learn about topics such as salmon and climate change through hands on activities. We will be outdoors and engage with the gifts of nature to explore art, designs, games, and ideas that you can take back to your students.

*Presented by Emily Styles:*

*Emily is a teacher at South Canoe Outdoor School. She is very passionate and experienced in teaching outdoors with primary children.*

### **Ask a Fisheries Biologist**

*Presented by Nicole Trouton (Yet to be confirmed):*

*Nicole was raised near Kingfisher and has always been involved with the care of the salmon in the river. She continued her schooling and has a Masters of Science Degree with an emphasis on fisheries. She works with DFO focussing on Chinook and Coho stocks particularly in the Shuswap River.*

### **Water songs by Campfire**

*Presented by Murray MacDonald:*

*Murray is a local musician who has been teaching music and will present a number of songs with and without environmental themes.*

### **Salmon Station**

*Presented by Melissa Lesko:*

*Melissa is our new Community Advisor for the Department of Fisheries and Oceans. She brings a wealth of knowledge and experience working to help preserve this precious species.*