



2024 WORKSHOP SERIES

HEALTH

Climate Education In
Teacher Education

Monday, November 25, 2024



Social Sciences and Humanities
Research Council of Canada
Conseil de recherches en
sciences humaines du Canada



Land Acknowledgement



Traditional Territory Acknowledgement
Since time immemorial, Indigenous peoples have walked gently on the diverse traditional territories where the University of Northern British Columbia community is grateful to live, work, learn, and play. We are committed to building and nurturing relationships with Indigenous peoples, we acknowledge their traditional lands, and we thank them for their hospitality.

The Prince George campus is situated on the unceded traditional territory of the Lheidli T'enneh First Nation, part of the Dakelh (Carrier) peoples' territory.

The South-Central campus in Quesnel is situated on the unceded traditional territories of the Lhtako Dene Nation, Nazko First Nation, Lhoosk'uz Dené Nation, and Esdilagh First Nation (formerly Alexandria Band). Lhtako, Nazko, and Lhoosk'uz are on traditional Dakelh territory, and Esdilagh is a member of the Tsilhqot'in Nation.

The Northwest campus in Terrace is situated on the unceded traditional Ts'msyen (Tsimshian) territory of the Kitsumkalum and Kitselas First Nation. It includes a satellite campus in the coastal community of Prince Rupert, situated on the unceded traditional Tsimshian territory of the Lax Kw'alaams Band and Metlakatla First Nation.

✦ Workshop Flow ✦



Act 1

Personal
Health

Act 3

Health
Beyond
Humans

Act 2

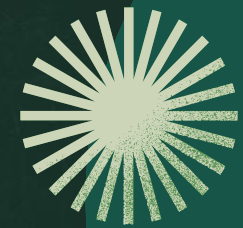
School/
Community
Health

Act 4

Health &
Professional
Practice



Consideration



The workshop includes images that are intended to provoke feelings/reactions.

As a result, you may feel uncomfortable. We ask that you sit with your feelings.

There will be various opportunities to share your feelings with others, if you so wish.

Please, do what you need to do for self-care.

We can direct you to supports, reach out

Act 1

Group 1

Afraid/Scared

Urgency

hopeful

Group 2

Emotional seeing the images - especially with pending election results

Confused/Why aren't more concerned?

Sad

Group 3

Sadness
Shock
Anger
Feeling overwhelmed

Group 4

almost resignation feeling of powerlessness

depressing to see man made changes

overall sad

curiosity who took the photos, what was the context

which photos would the general public prefer

are people willing to give up something of their own to achieve a middle ground

middle ground between the extremes

Group 5

frustration

sadness

worry

Worries for Great Grandparents of my children, and for my children

Group 6

Feel angry and frustrated because people have done this, not nature

resilience
build agency

This is not all far away and easy to ignore. its close to home

From Workshop #1 to #2

What were your reactions?

Act 1

..... Breakout Activity



What kinds of health are important to you and why?



Consider health broadly: physical, mental, emotional, spiritual, social/communal, etc.

Pre-reminder

Breakout Group tasks upon return



Write or add photos to Miro Mind Map as you consider the prompt



Select a member to be the speaker to report back after



For Share out:
1-2 min/group

Act 1

Post Breakout

What kinds of health are important to you and why?

Photo credit: Laura Rodriguez



Act 2

School/
Community
Health

..... **What are your
reactions to the
following headlines?**

Examples of compromised student health

1

Extreme
Heat/Cold

2

Fire/Smoke

3

Contact
Diseases

4

Airborne
Pathogens

Canada

Extreme heat days are overheating schools more often – and experts say it needs our attention

Kids suffer when their classrooms get too hot, and climate change means that'll happen more often

[Jessica Wong](#) · CBC News · Posted: Jun 18, 2024 1:00 AM PDT | Last Updated: June 19



Misting station gives some relief from hot classrooms

Jessica Wong. “Extreme heat days are overheating schools more often — and experts say it needs our attention” CBC News · Jun 18, 2024. <https://www.cbc.ca/news/canada/education-hot-classrooms-1.7228249>

Boy, 9, died of asthma attack made worse by wildfire smoke, parents say

B.C. Coroners Service issues public safety bulletin after Carter Vigh's death in 100 Mile House

[Rhianna Schmunk](#) · CBC News · Posted: Jul 17, 2023 1:11 PM PDT | Last Updated: July 17, 2023



Rhianna Schmunk . "Boy, died of asthma attack made worse by wildfire smoke, parents say" CBC News. Jul 17, 2023.

<https://www.cbc.ca/news/canada/british-columbia/nine-year-old-asthma-death-bc-wildfires-1.6909013>

Ticks are starting to awaken from their winter slumber and can be found across the Thompson-Okanagan region

Darren Handschuh - Mar 2, 2024 / 11:30 am



Photo: Colin Kennedy

Darren Handschuh. Ticks are starting to awaken from their winter slumber and can be found across the Thompson-Okanagan region. Mar 2, 2024.

<https://www.castanet.net/news/Vernon/475110/Ticks-are-starting-to-awaken-from-their-winter-slumber-and-can-be-found-across-the-Thompson-Okanagan-region>

Federal lab confirms B.C. teen is first to contract bird flu in Canada



By **Amy Judd** • Global News

Posted November 13, 2024 1:50 pm · Updated November 13, 2024 1:58 pm · 2 min read



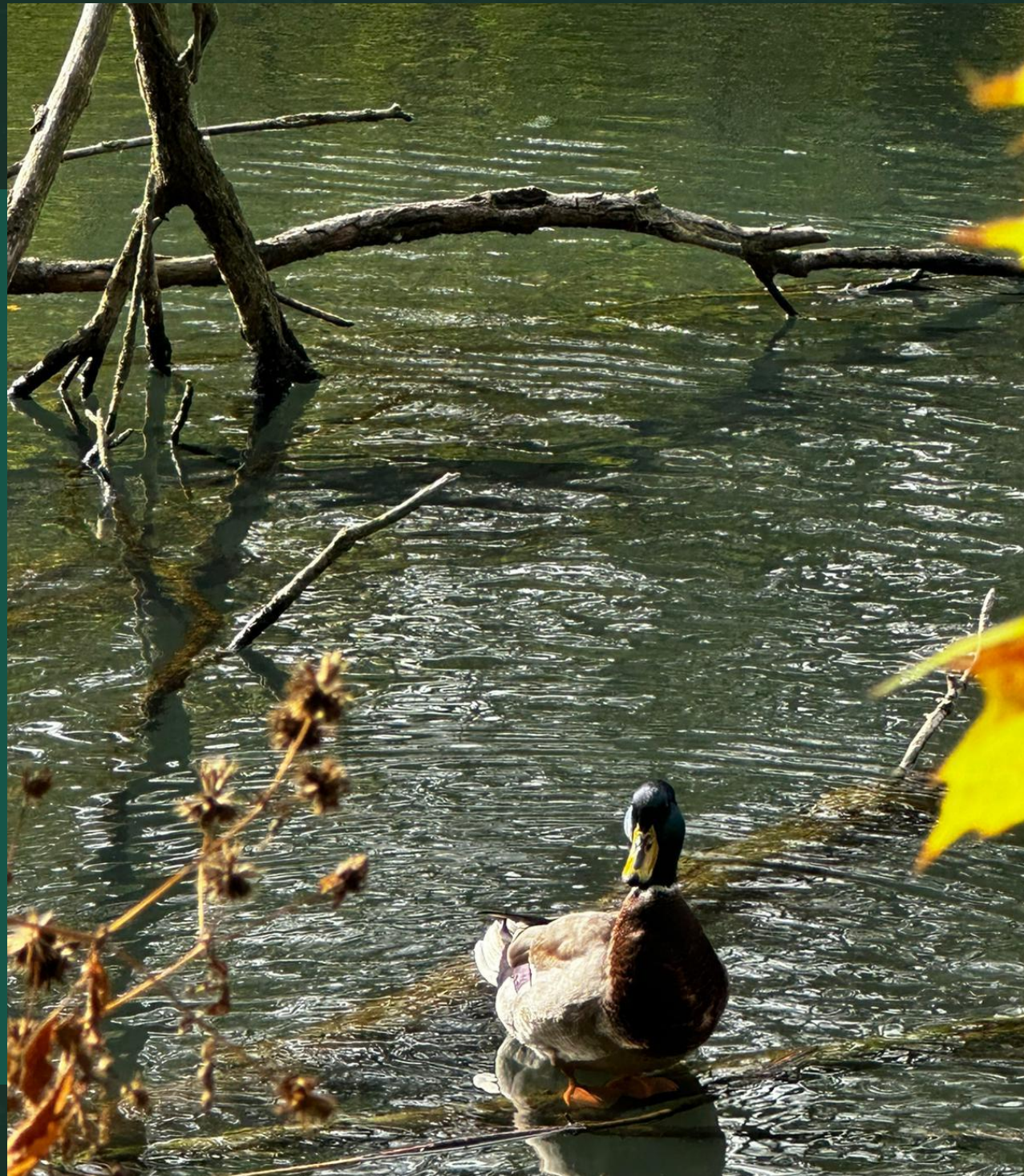
Amy Judd. "Federal lab confirms B.C. teen is first to contract bird flu in Canada." Global News. November 13, 2022.

<https://globalnews.ca/news/10868209/federal-lab-confirms-bc-teen-first-contract-bird-flu-canada/>

Act 2

Pre reminder

Breakout Group tasks upon return



Select a member to be the speaker



Share out:
1-2 min/group



Photo credit: Laura Rodriguez



Breakout Activity

**What are the
impacts on health
in your local
context?**



Consider: self, learners, colleagues, families, community-at-large

Act 2

Health- General Topics

1. Air Quality and Respiratory Health
2. Water Security and Health
3. Mental Health and Eco-Anxiety
4. Food Security and Nutrition
5. Extreme Weather Events and Preparedness
6. Ecosystem Health and Biodiversity
7. Energy Choices and Community Health
8. New pathogens



Photo credit: Laura Rodriguez

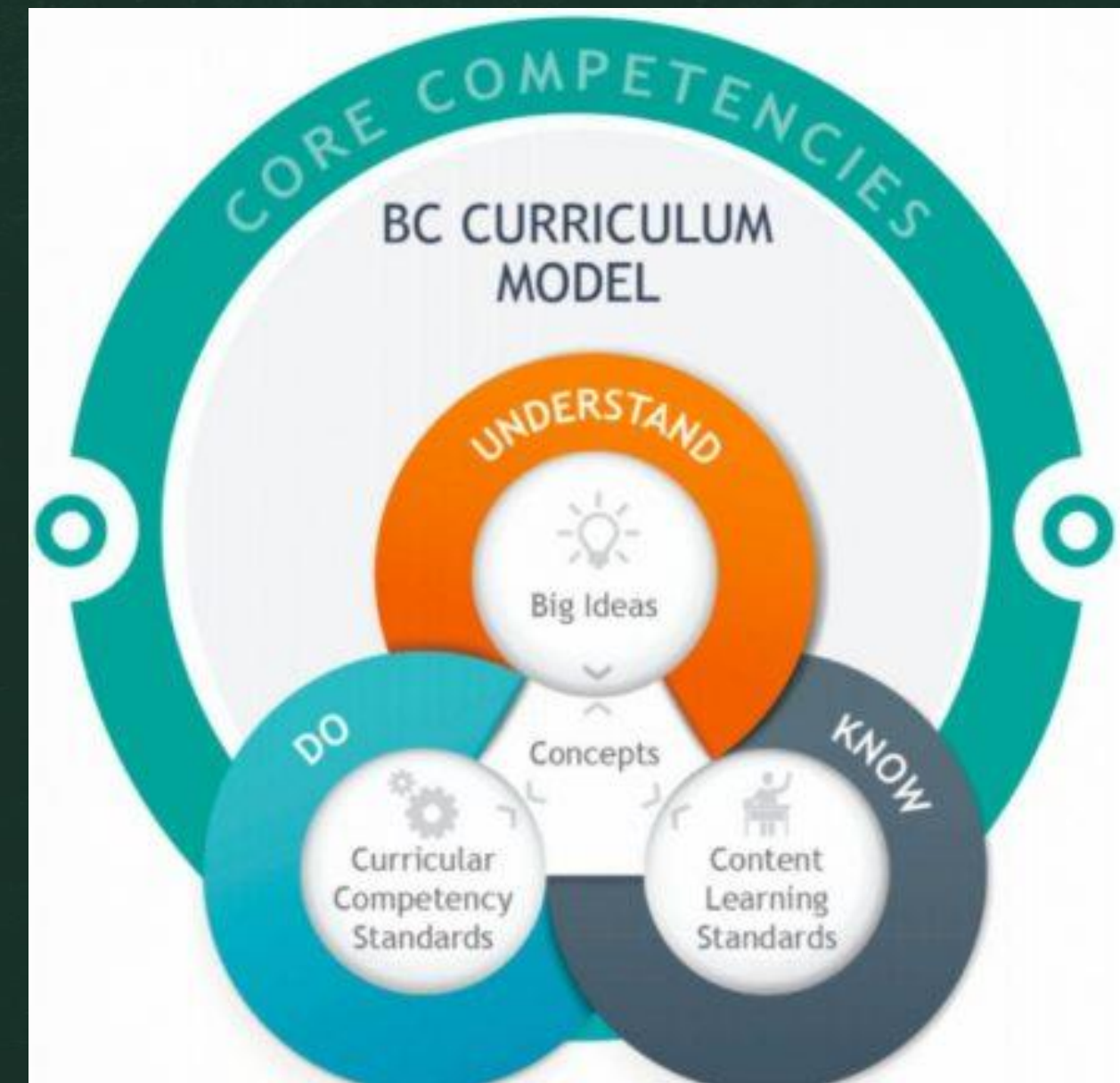
Why is health relevant to teachers?

Act 2

Professional standard #1

Educators value the success of all students.
Educators care for students and act in the best interest.

**Core Competency-
Social Awareness and
Responsibility – FACET:
Contributing to
community and caring
for the environment**





**Health is not just
about humans**

**FPPL #1- Learning ultimately
supports the well-being of the
self, the family, the
community, the land, the
spirits, and the ancestors.**

Act 2 - 3

<https://www.fnesc.ca/first-peoples-principles-of-learning/>

FIRST PEOPLES **PRINCIPLES OF LEARNING**

Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors.

Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place).

Learning involves recognizing the consequences of one's actions.

Learning involves generational roles and responsibilities.

Learning recognizes the role of indigenous knowledge.

Learning is embedded in memory, history, and story.

Learning involves patience and time.

Learning requires exploration of one's identity.

Learning involves recognizing that some knowledge is sacred and only shared with permission and/or in certain situations.



For First Peoples
classroom resources
visit: www.fnesc.ca



Health- General Topics

1. Air Quality and Respiratory Health

2. Water Security and Health

3. Mental Health and Eco-Anxiety

4. Food Security and Nutrition

5. Extreme Weather Events and Preparedness

6. Ecosystem Health and Biodiversity ✨

7. Energy Choices and Community Health

8. New pathogens

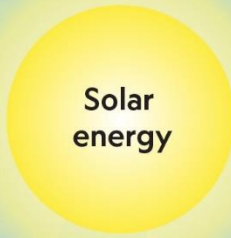
Human health depends on Ecosystem Health and Biodiversity

Act 3



ENERGY FLOW IN AN ECOSYSTEM

Each trophic level passes on about 10 percent of the energy it consumes to the next trophic level. Some of this energy is lost in the form of heat released into the environment.



Decomposers like fungi, worms, and bacteria, break down the waste of the consumers. They breakdown organic material and provide the soil with nutrients that will be used by primary producers.

Tertiary consumers are carnivores that eat secondary consumers.

Animals called secondary consumers, mostly carnivores, eat primary consumers. Omnivores eat plants as well as animals and are also secondary consumers.

Herbivores, animals known as primary consumers, eat primary producers.

Plants are primary producers. They convert sunlight, carbon dioxide, and water into sugars and oxygen through photosynthesis.



Act 3

Ecosystem Health and Biodiversity



Act 3

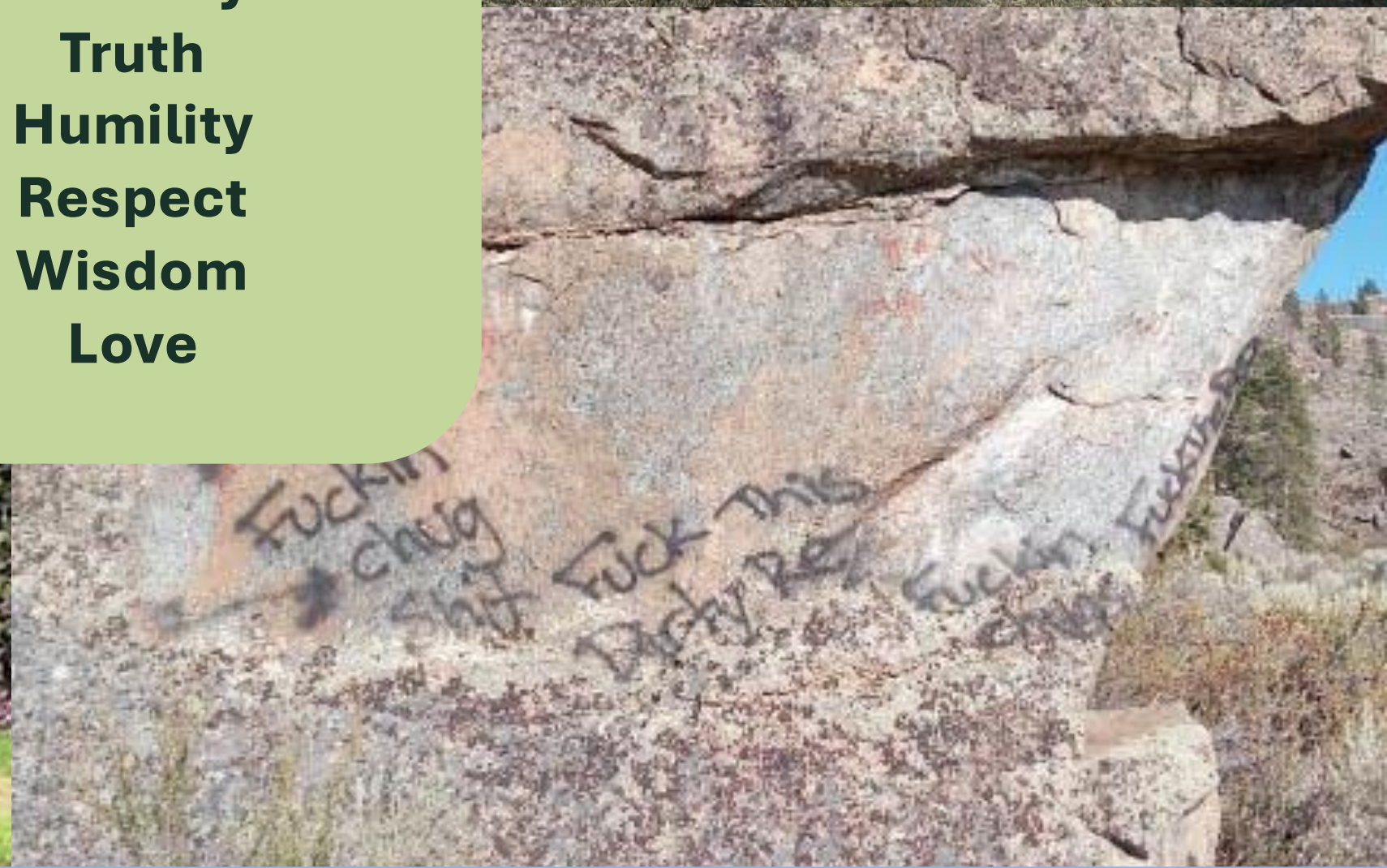
Respectful Health

Dakelh Enduring Value and Understanding

Truth and Honesty
Respect
Responsibility
Self-Identity
Community

Seven Sacred Teachings

Courage
Honesty
Truth
Humility
Respect
Wisdom
Love



DAKELH

HOLISTIC LIFELONG LEARNING MODEL



Act 3

Types of Positive Relationship with Nature Connectedness

Holistic Health

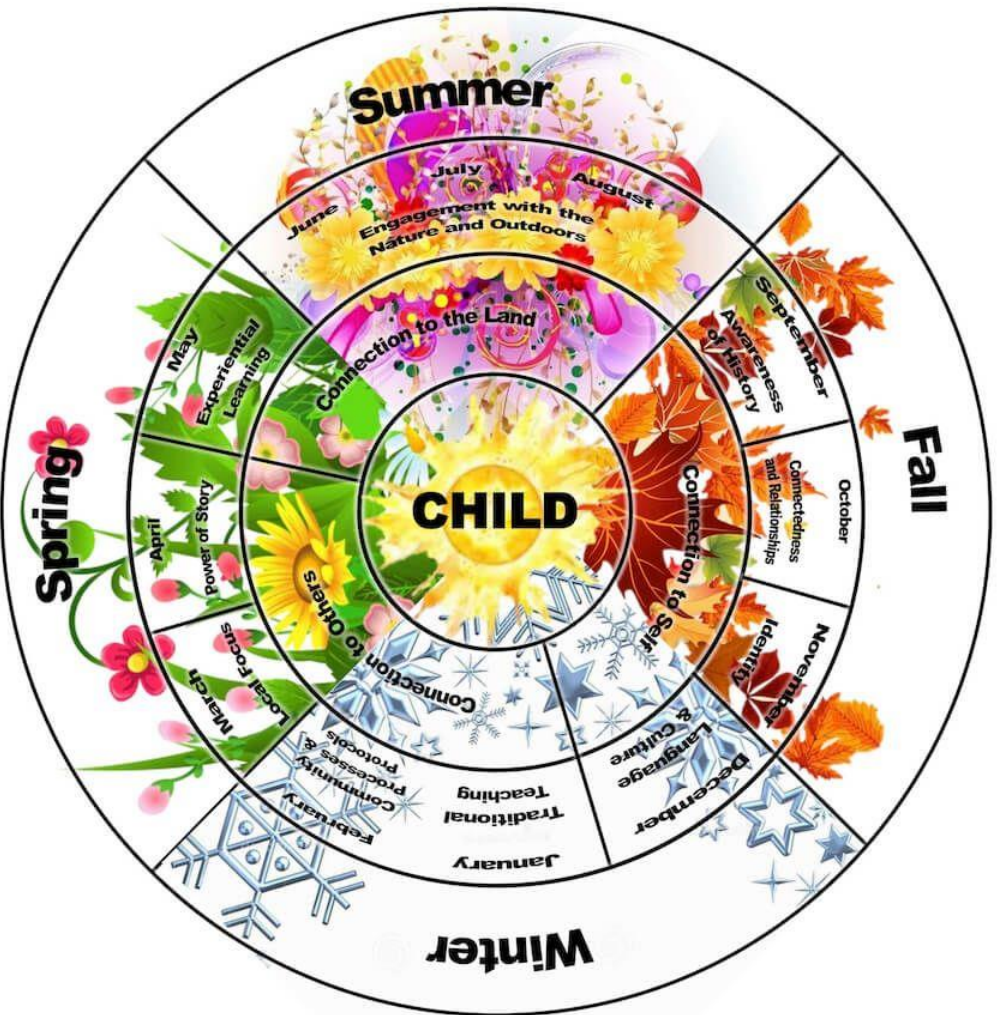
Emotion
Feelings for
Nature

Compassion
Care for
Nature

Contact
Sensory
Interaction
with Nature

Meaning
Cultural
Relationship
with Nature

Beauty
Noticing the
beauty of
Nature



This pristine Canadian river has legal personhood, a new approach to conserving nature

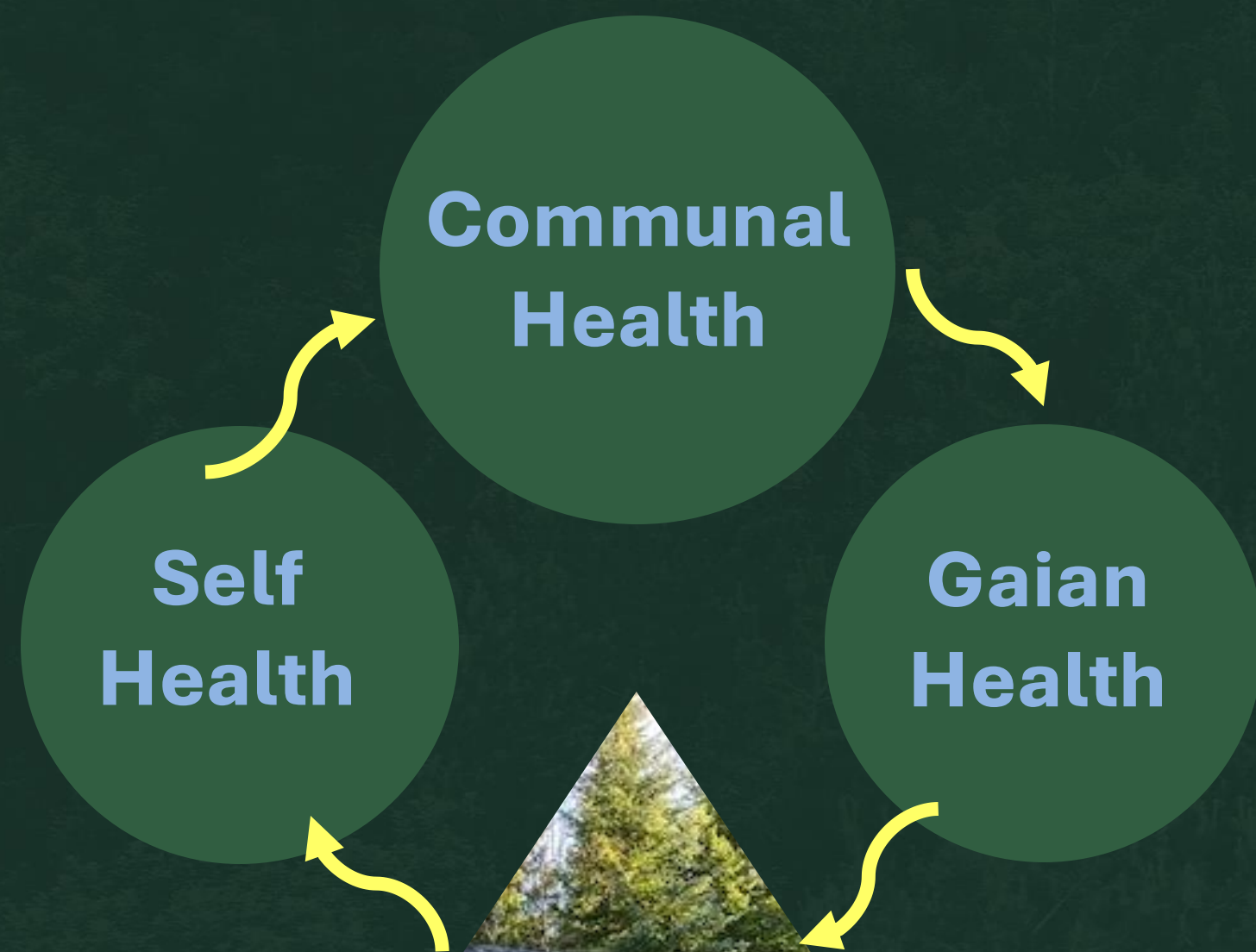


[Elizabeth Benner](#) · Elizabeth Benner · Posted: Feb 01, 2024 9:02 AM PST | Last Updated: February 1



Elizabeth Benner. "This Pristine Canadian River has Legal Personhood, a New Approach to Conserving Nature." CBC News. Feb 01, 2024.
<https://www.cbc.ca/documentaries/the-nature-of-things/this-pristine-canadian-river-has-legal-personhood-a-new-approach-to-conserving-nature-1.7100728#:~:text=In%202021%2C%20this%20river%20was,wildlife%20that%20depend%20on%20them>

Act 4



Conversation
How might health be addressed and people empowered in your professional context?



Change starts with you...

Breakout Activity

Act 4



Field trips

Collaborations

Unit plans

What happens Monday?

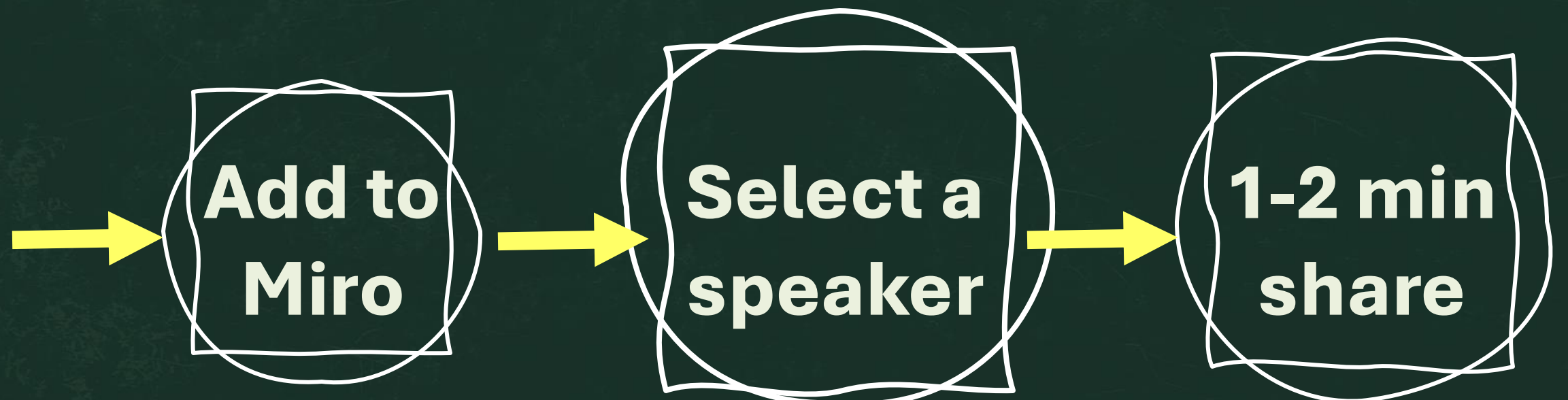
Guests

Lesson plans

Activities

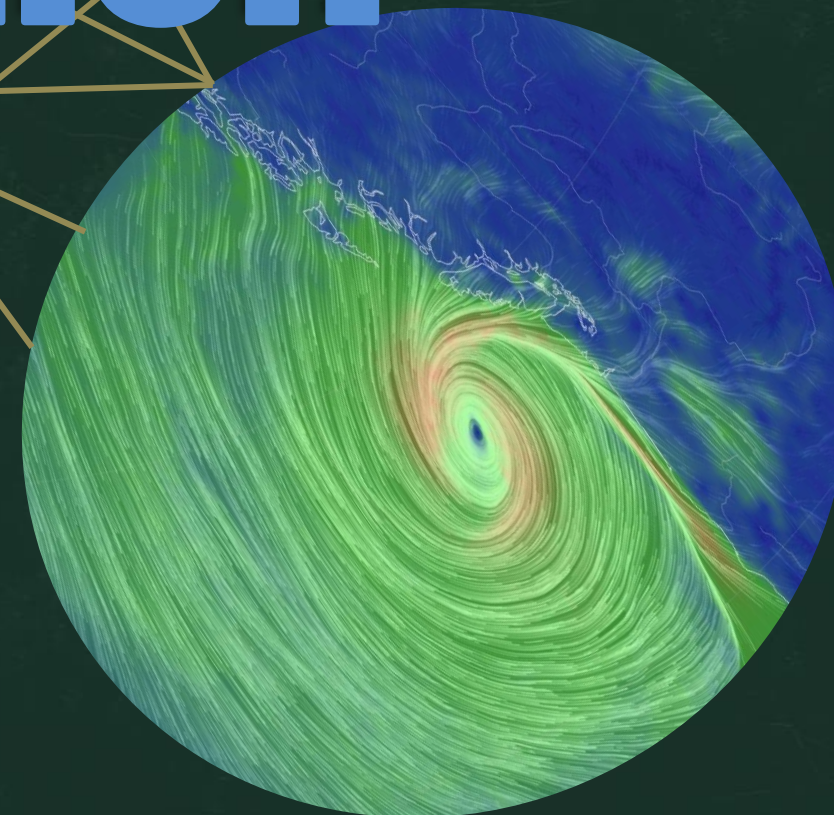
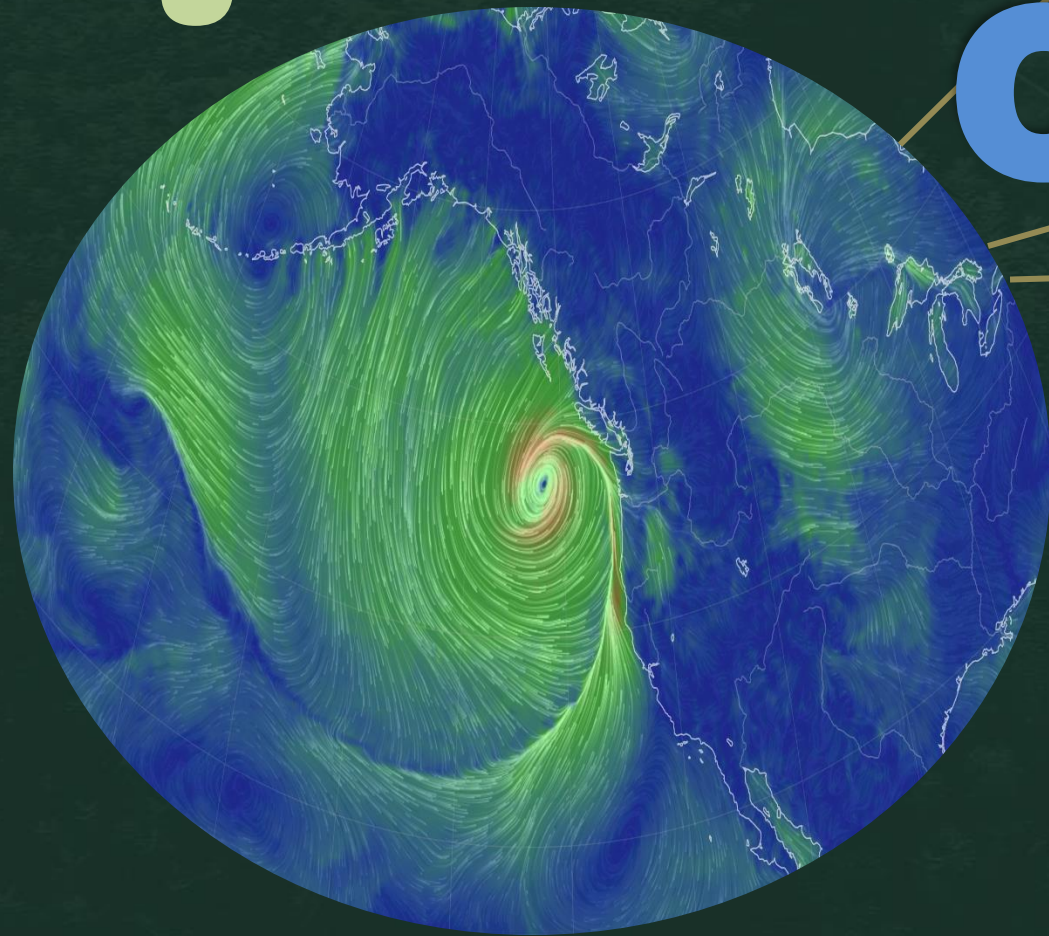
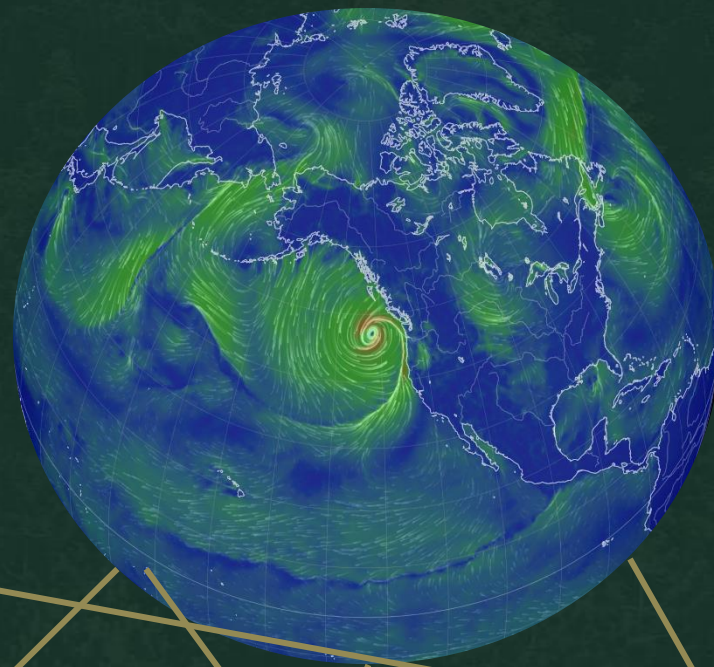
Partnerships

Breakout Group Tasks

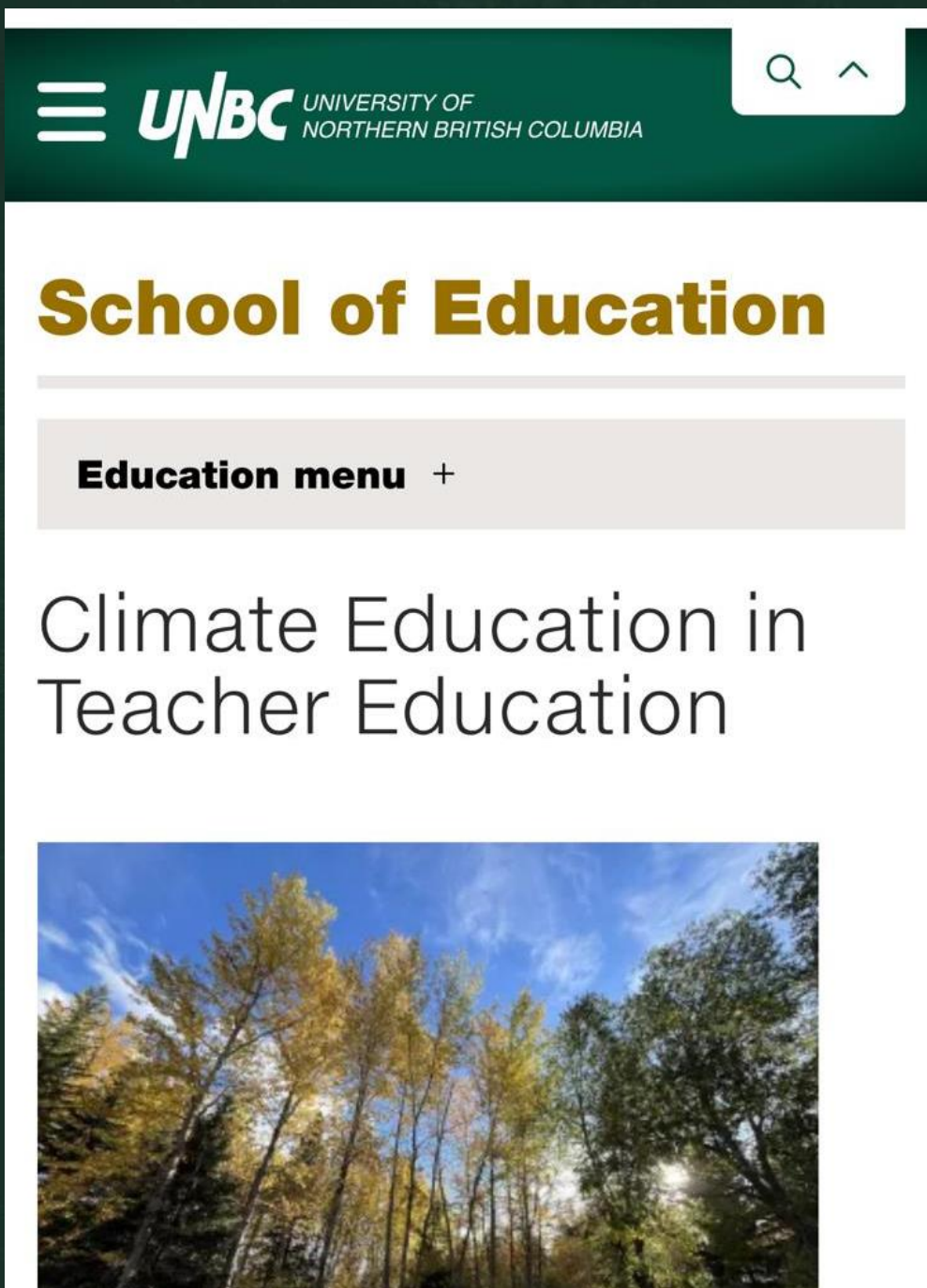
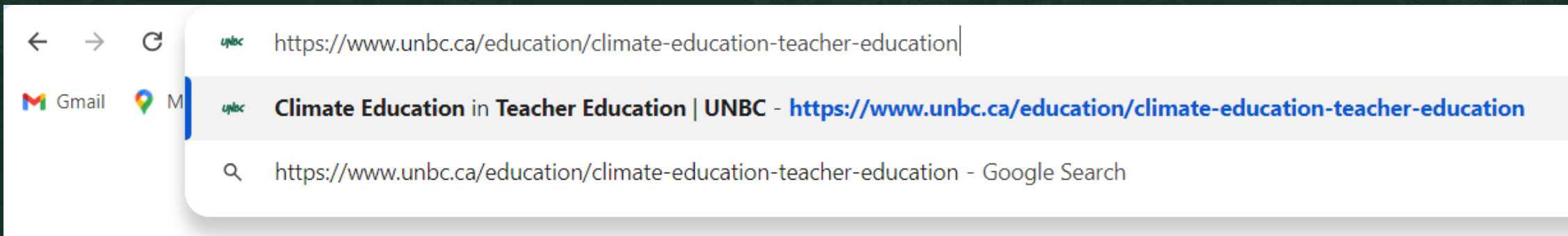


Act 4

Health Constellation



CETE: Webpage Resources



CETE Workshops (March 2023 to June 2023)

- Video 1 - [Interpreting Climate Change](#) - March 14, 2023
- Video 2 - [Aims of Climate Education](#) - April 4, 2023
- Video 3 - [Pedagogy Planning for the Classroom](#) - April 21, 2023
- Video 4 - [Evaluating Your Pedagogy](#) - May 19, 2023

CETE Workshops (September 2023 to June 2024)

- Video 1 - [Interpreting Climate Change: Engaging Through Pedagogy](#) - October 20, 2023
- Video 2 - [From Aims to Means: Climate Education and BC's Curriculum](#) - November 24, 2023
- Video 3 - [Aims and Means to Lesson Planning: Teaching for Climate Action](#) - Jan. 29, 2024
- Video 4 - [Anxiety, Agency, and Action in the Face of Climate Uncertainty](#) - April 26, 2024

<https://www.unbc.ca/education/climate-education-teacher-education>



CETE: Webpage Resources continued

Who can participate in the CETE study?

For Pre-Service Teachers:

1. Are you a teacher candidate in the UNBC Teacher Education Program?
2. Are you interested in or concerned about climate change or climate change education?
3. Are you willing to engage in several activities to learn more about climate education and contribute to the professional development of others?

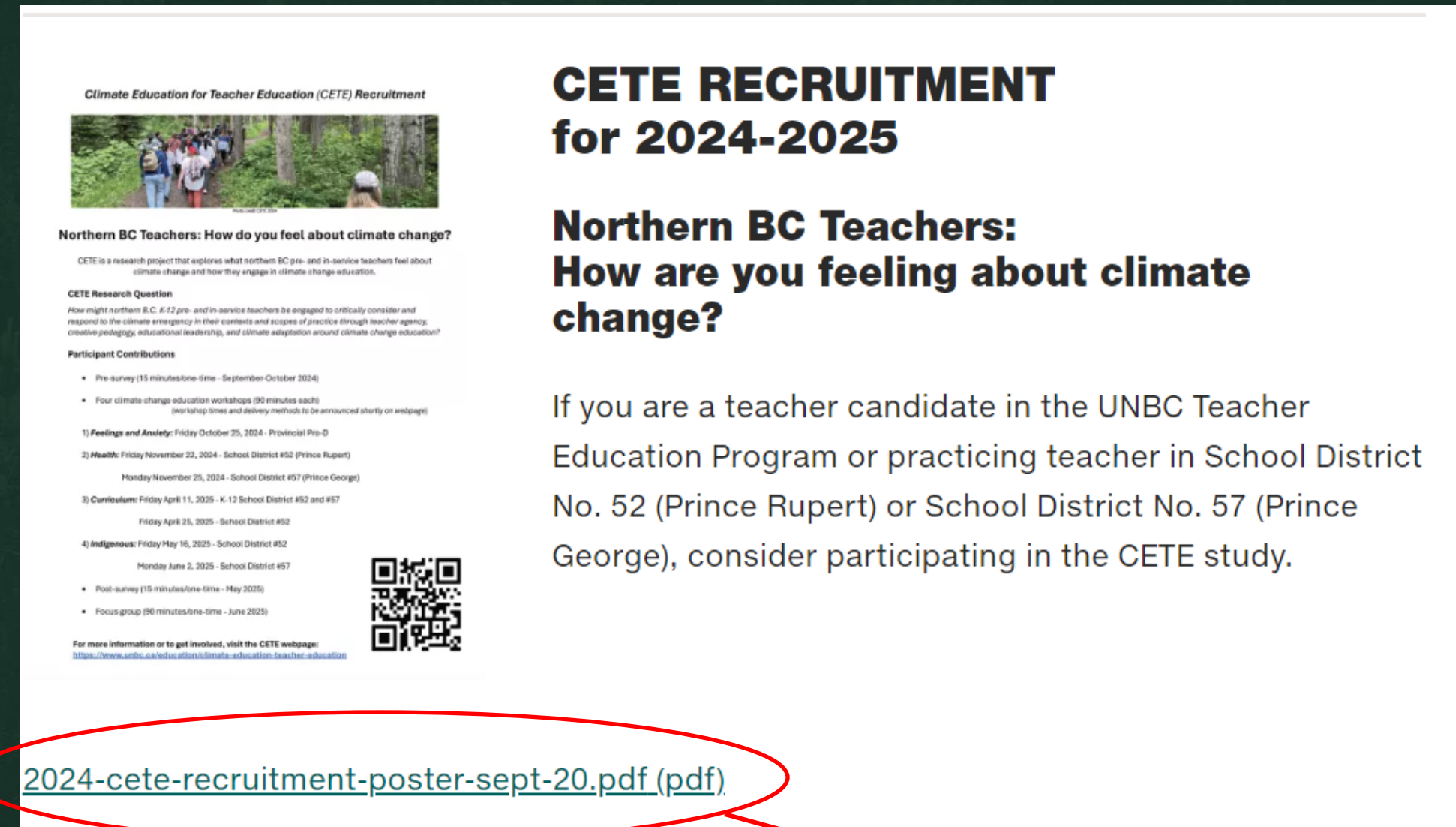
For In-Service Teachers:

1. Are you a practicing teacher in School District 52 (Prince Rupert) or School District 57 (Prince George)?
2. Are you interested in or concerned about climate change or climate change education?
3. Are you willing to engage in several activities to learn more about climate education and contribute to the professional development of others?

If you've answered "yes" to all three questions and would like to participate in the CETE study, please read the [CETE Information Letter and Consent \(pdf\)](#) and take a moment to complete the [Pre-Survey](#). The pre-survey takes approximately 10-20 minutes to complete.

CETE Pre-Survey

Participants Pre-Survey
access



The screenshot shows a recruitment poster titled "Climate Education for Teacher Education (CETE) Recruitment". It features a photograph of a group of people walking on a forest path. The text on the poster includes:

- Northern BC Teachers: How do you feel about climate change?**
- A brief description of the CETE research project.
- CETE Research Question:** "How might northern B.C. K-12 pre- and in-service teachers be engaged to critically consider and respond to the climate emergency in their contexts and scopes of practice through teacher agency, creative pedagogy, educational leadership, and climate adaptation around climate change education?"
- Participant Contributions:**
 - Pre-survey (15 minutes one-time - September-October 2024)
 - Four climate change education workshops (90 minutes each) (workshop times and delivery methods to be announced shortly on webpage)
- 1) Feelings and Anxiety:** Friday October 25, 2024 - Provincial Pre-D
- 2) Health:** Friday November 22, 2024 - School District #52 (Prince Rupert) / Monday November 25, 2024 - School District #57 (Prince George)
- 3) Curriculum:** Friday April 11, 2025 - K-12 School District #52 and #57 / Friday April 25, 2025 - School District #52
- 4) Indigenous:** Friday May 16, 2025 - School District #52 / Monday June 2, 2025 - School District #57
- Post-survey (15 minutes one-time - May 2025)
- Focus group (90 minutes one-time - June 2025)

At the bottom, it says "For more information or to get involved, visit the CETE webpage: <https://www.unbc.ca/education/climate-education/teacher-education>". A QR code is also present.

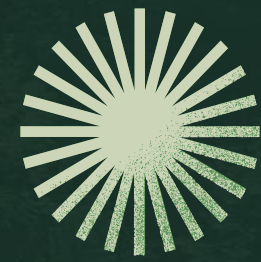
A red circle highlights the link [2024-cete-recruitment-poster-sept-20.pdf \(pdf\)](#) at the bottom of the poster. A red arrow points from this link to the text "Recruitment poster" on the right side of the slide.

CETE RECRUITMENT for 2024-2025

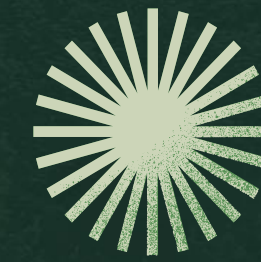
Northern BC Teachers: How are you feeling about climate change?

If you are a teacher candidate in the UNBC Teacher Education Program or practicing teacher in School District No. 52 (Prince Rupert) or School District No. 57 (Prince George), consider participating in the CETE study.

Recruitment poster



Feedback



How might CETE help support northern BC K-12 teachers to learn about climate change?

How might CETE encourage more northern BC teachers to participate in CETE initiatives?

CETE Up-Coming Workshops

Health:

Monday November 25, 2024 - SD#57 Pro- D

Curriculum:

Friday April 11, 2025 – Spring Fling #57 Pro- D

Friday April 25, 2025 - School District #52 Pro- D

Indigenous:

Friday May 16, 2025 - School District #52 Pro- D

Monday June 2, 2025 - School District #57 Pro- D

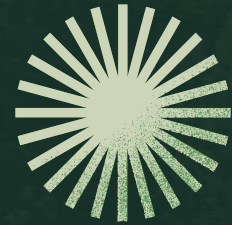


<https://www.unbc.ca/education/climate-education-teacher-education>





Partners and Collaborators



Mussicho!

<https://www.unbc.ca/education/climate-education-teacher-education>

Research Team

- Dr. Hartley Banack
- Dr. Alexander Lautensach
- Dr. Christine Ho Youngusband
- Dr. David Litz
- Dr. Joanie Crandall
- Glen Thielmann
- Janet Ocloo
- Laura Rodriguez Galarza



For more information about CETE, please contact Dr. Hartley Banack by email at hart.banack@unbc.ca