



Friday November 24, 2023  
1:00-2:30 PM

# From Aims to Means: B.C.'s Curriculum & Climate Education

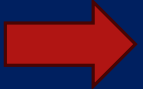
CETE WORKSHOP 2 IN THE FALL 2023 / SPRING 2024 SERIES

Partners/Design Team



# Land Acknowledgment: People, Place and Land

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## **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.

# Agenda

Aims and Means to know  
where are we going?

- **Part 1** – Follow up from WS#1
- **Part 2** – First exploration of B.C. Curriculum & climate change education- **Core Comps**
- **Part 3** – Means & **Aims**: relationship & alignment
- **Part 4** - Take-aways



For prior CETE  
Workshops,  
click QR code



# Part 1 - Workshop 1 follow up

Core Comps  
&  
FPPL

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Your Requests

▶ Participant input:  
Requested topics

▶ WS#1- optional call:  
Your classroom observations?

▶ Miro concept map



- Integrate Climate Education across and the BC curriculum
- Gaps in the BC curriculum and climate change education
- Peer-supported collaborative curriculum design → Aims & Means
- Lesson planning and climate change education
- Motivating learners and climate change education
- Considering learner values and climate change education
- Dealing with feelings (anxiety, apathy, denialism, fatalism, false optimism) around climate change

Future workshops

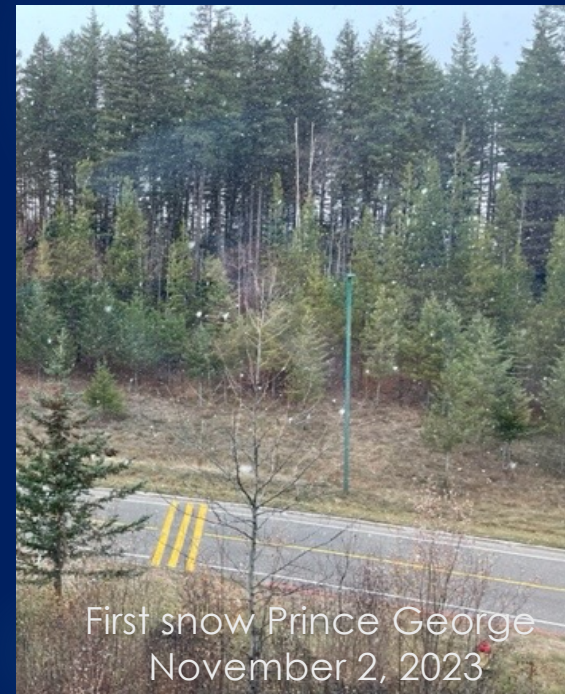




## Part 2 - First exploration of B.C. Curriculum

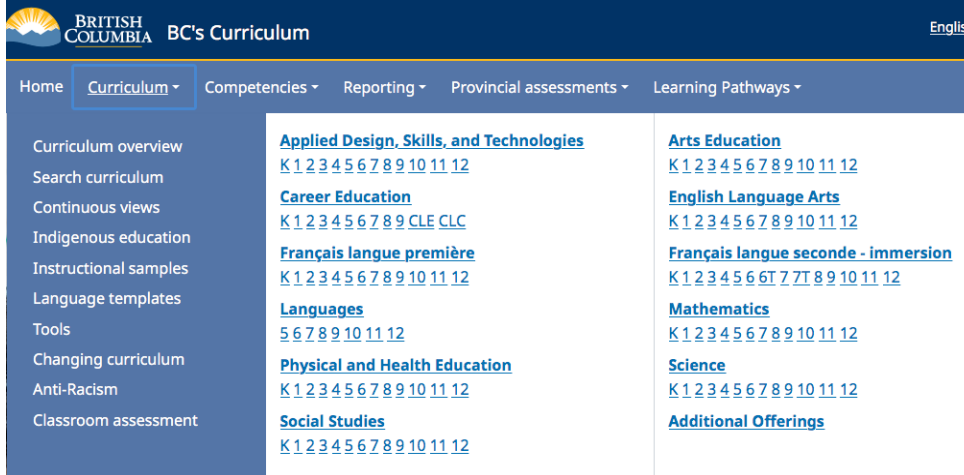
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- **Situating climate change in the B.C. Curriculum**
- **Core Competencies as Aims**
- **The 'Wheel' and Core Competencies**



# Situating Climate Change in B.C. Curriculum

- ▶ Many challenges exist in communicating about the social and scientific aspects of climate change between scientists and teachers and students – one of these challenges is the "environmental gap" in the BC K-12 curriculum, particularly the perceived lack of emphasis on climate education



- Recommended topic in Science 7
- Side topic in Science 9, Science 10
- Possible topic in some science electives
- Suggested subtopic in Social Studies



# Climate Change in B.C. Curriculum

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## BC Ministry of Education:

"The K–12 education system is rising to the challenge of educating students to build climate resilience in uncertainty, to mitigate the impacts of climate change through preparedness and adaptation, and to contribute to climate solutions as change-makers and leaders"

"The curriculum is concept-based and competency-driven and provides many opportunities to explore climate change in varying levels of detail, across learning areas and grades. For example, topics related to the environment and climate change are found in the required learning standards throughout the provincial science curriculum from Kindergarten to Grade 10"

**Explore Science curriculum**

**Kindergarten to Grade 9**

Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
K-9 PDF	K-9 DOCX								

**Grade 10**

science

Science 10	WEB	PDF	DOCX
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**Grade 11**

Chemistry 11	WEB	PDF	DOCX
Earth Sciences 11	WEB	PDF	DOCX
Environmental Science 11	WEB	PDF	DOCX
Life Sciences 11	WEB	PDF	DOCX
Physics 11	WEB	PDF	DOCX
Science for Citizens 11	WEB	PDF	DOCX

**Grade 12**

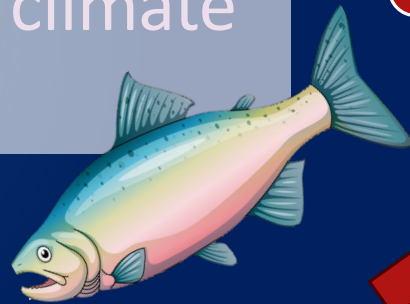
Anatomy and Physiology 12	WEB	PDF	DOCX
Chemistry 12	WEB	PDF	DOCX
Environmental Science 12	WEB	PDF	DOCX
Geology 12	WEB	PDF	DOCX
Physics 12	WEB	PDF	DOCX
Specialized Science 12	WEB	PDF	DOCX

**“TEACHER AGENCY”**

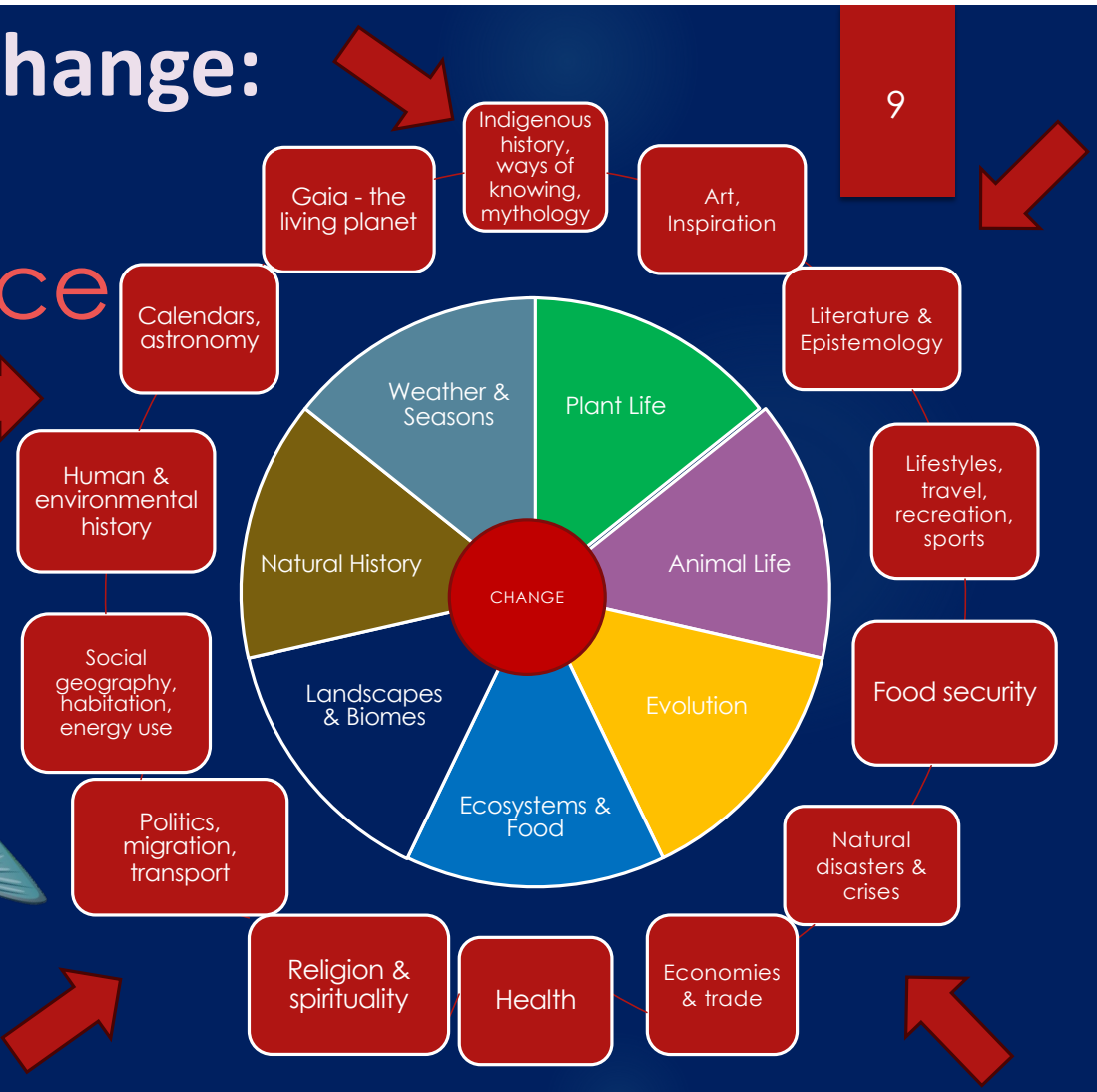
# The Wheel & Climate Change:

## Field of Experience & Topics

The “**Wheel**” illustrates experiences of climate change



Example: salmon



# New spins on The Wheel for Climate Change





## Core Competencies



C

### Communication

- Connecting and engaging with others
- Focusing on intent and purpose
- Acquiring and presenting information

C

### Collaborating

- Working collectively
- Supporting group interactions
- Determining common purposes

T

### Creative Thinking

- Creating and innovating
- Generating and incubating
- Evaluating and developing

T

### Critical & Reflective Thinking

- Analyzing and critiquing
- Questioning and investigating
- Designing and developing
- Reflecting and assessing

PS

### Personal Awareness & Responsibility

- Self-advocating
- Self-regulating
- Well-being

PS

### Positive Personal & Cultural Identity

- Understanding relationships and cultural contexts
- Recognizing personal values and choices
- Identifying personal strengths and abilities

PS

### Social Awareness & Responsibility

- Building relationships
- Contributing to community and caring for the environment
- Resolving problems
- Valuing diversity

# Core Competencies :

## Aims & Means

Aims and Means  
are confusing!?!?

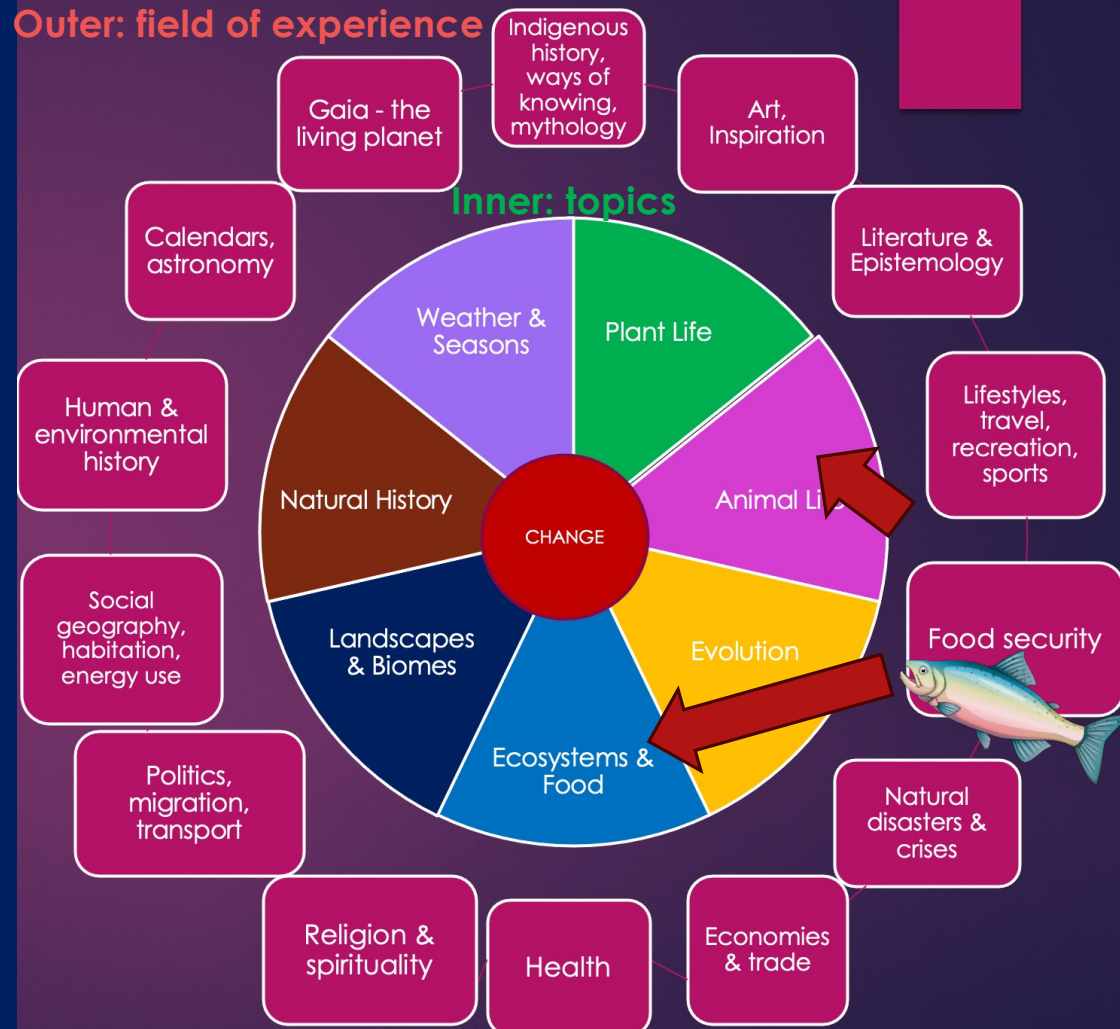
# Breakout Activity: Connecting Wheel & Core Competencies

## Task

1. Choose a **field of experience** in the outer wheel.
2. Identify a **topic** in the inner wheel.
3. Connect **Core Competencies** to **field of experience** & **topics**.
4. Post to *Miro Mind Map*
5. Report out on decisions

## Example: salmon

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# 1. Task Illustration: Connecting the Wheel & the Core Competencies

## Step 1

Outer wheel

Field of Experience

You choose



## Step 2

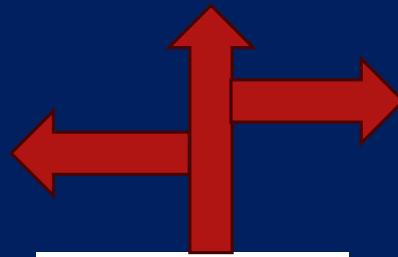
Inner wheel

Topic

You choose

Now What?

Return to during reporting



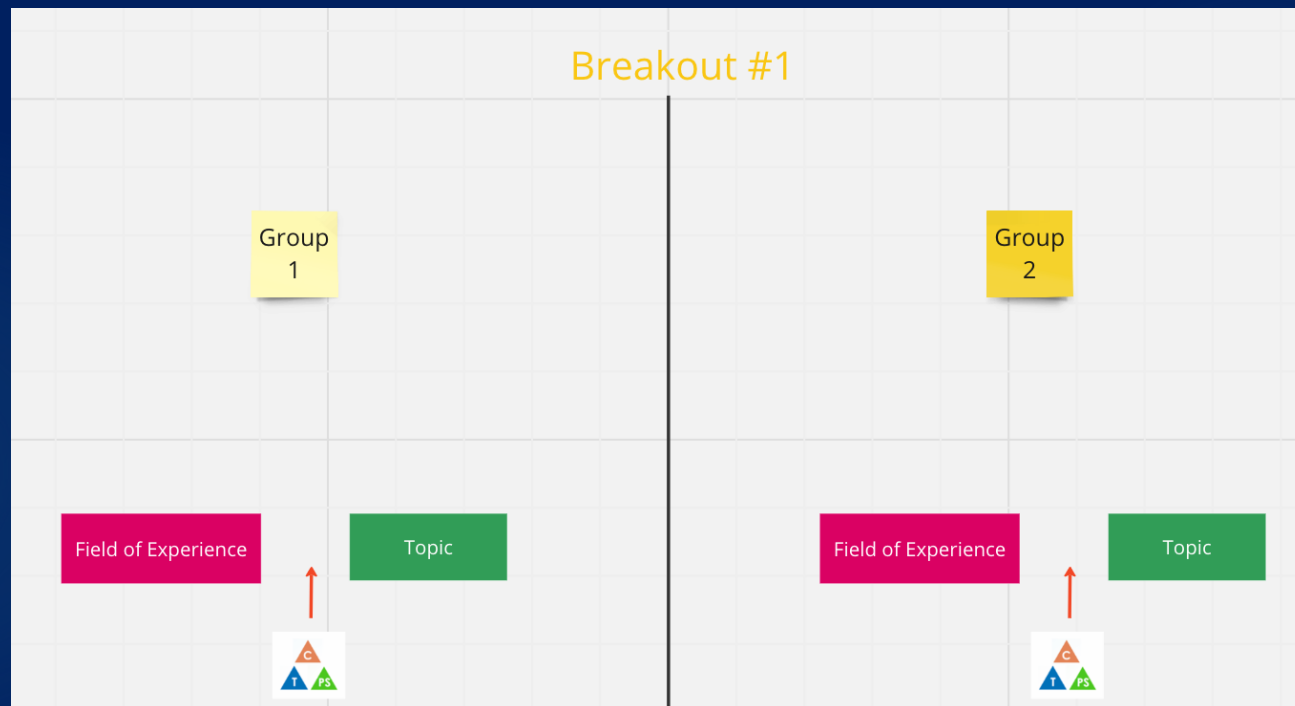
Core Comps

## Step 3

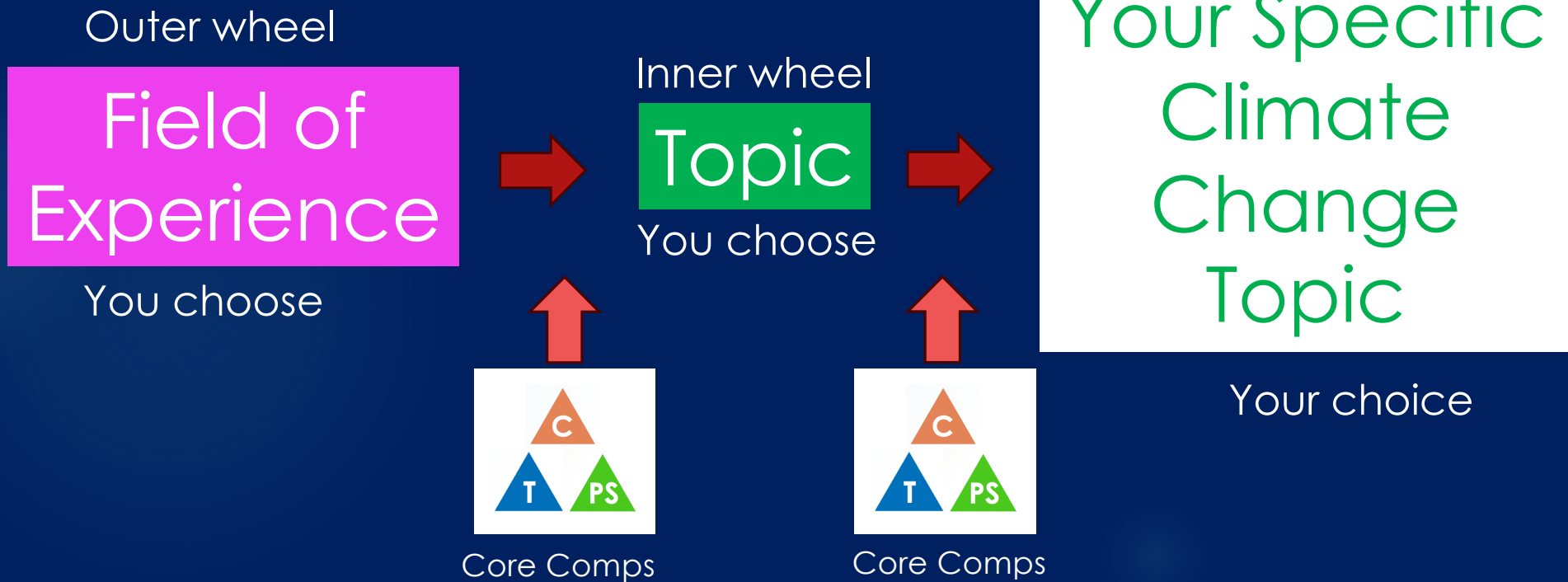


# Miro Work

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Review examples



# Part 3- Means & Aims: Relationship & Alignment

**“TEACHER  
AGENCY”**

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Aims and Means are confusing for everyone

## Core Competencies (B.C. MoE)

- [C] Communicating; collaborating;
- [T] Critical and reflective thinking; creative thinking;
- [P&S] Personal awareness and responsibility; Positive personal and cultural identity; social awareness and responsibility

## First People's Principles of Learning (FNESC)

- Learning supports well-being
- Holistic, reflexive, reflective, experiential, relational
- Recognises consequences
- Involves responsibilities
- Recognises role of indigenous knowledge
- Embedded in memory, history, story
- Involves patience and time
- Requires exploration of one's identity
- Recognising that some knowledge is sacred

**Conclusion: Aims can be Means & Means can be Aims. You decide!!!**





# Means & Aims: Climate Change Ed

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## 'AIMS'

*Develop a Community of Learners that ....*

- are resilient
- support holistic security
- reflect on their values
- understand climate justice
- learn from Indigenous practices
- develop crisis solutions

## CETE initial List

## 'MEANS'

- Alt. concepts of 'progress'
- Develop an ecocentric/ environmental ethic
- Practice collaboratively
- Explore common future visions
- Promote inquiry learning
- Reduce resource dependency
- Increase local sustainability

Confusing!?!

 **Conclusion: Aims and Means run along a single continuum. You decide!!** 

# So, How Do I **sort** my **Aims** from Means?!?

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## Sorting: Aims

- School priorities
- Community needs
- Local Outer/Inner Wheel Relationships
- CETE High-Level Conjectures
- Core Comps
- FPPL

## Sorting: Means

- Leadership ability
- Age/ grade level / learning styles
- Interdisciplinary priorities
- Continuity across grades
- Resource Availability for curriculum design
- Assessment approach

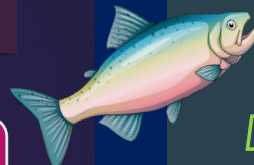
**“TEACHER AGENCY”**



# The Wheel & Climate Change

## Aims & Means

"TEACHER AGENCY"



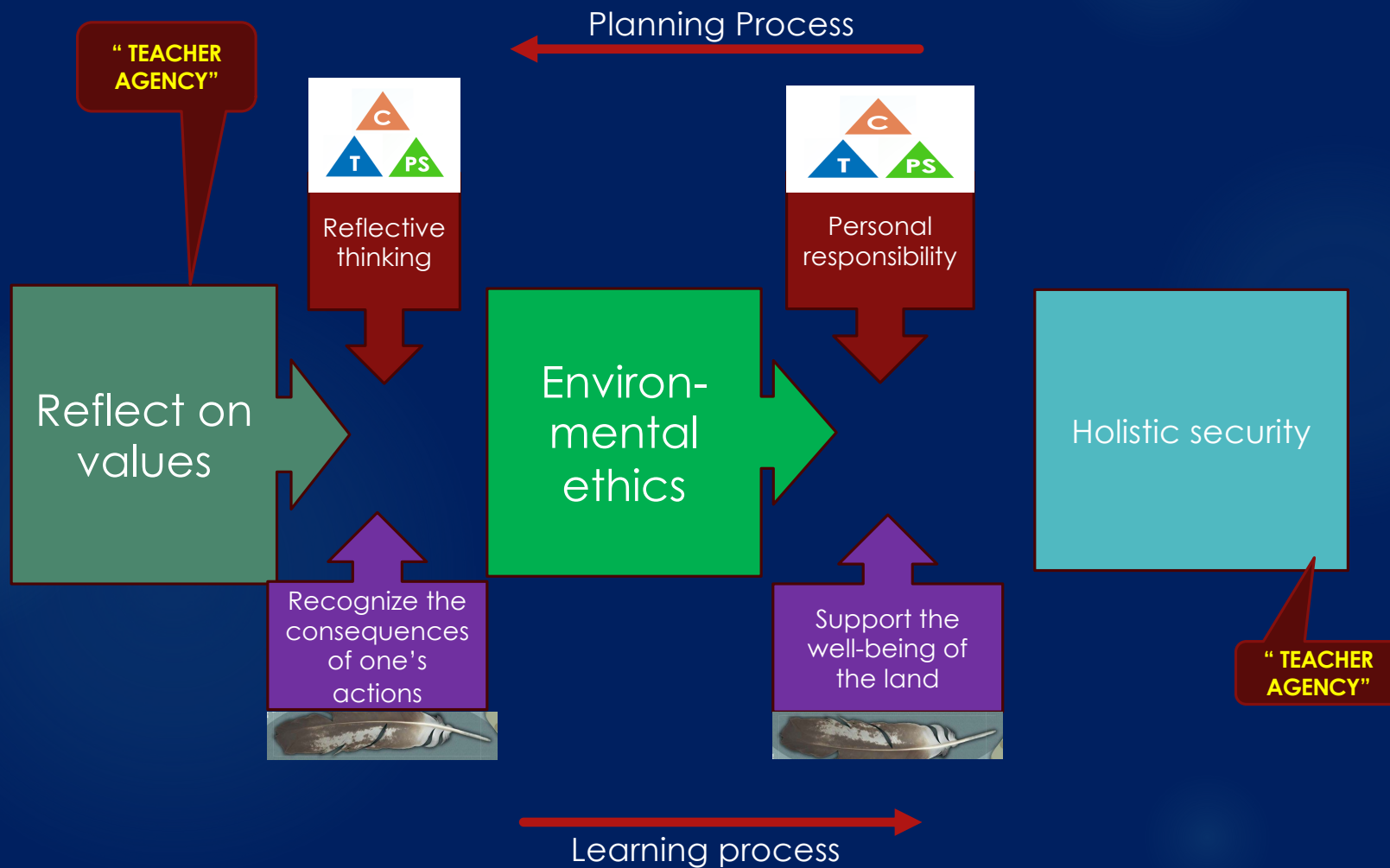
### 'AIMS'

*Develop a Community of Learners that ...*

- are resilient
- support holistic security
- reflect on their values
- understand climate justice
- learn from Indigenous practices
- develop crisis solutions

# Example: sorting Aims & Means

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# Breakout Activity: Sorting Aims and Means

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Task:

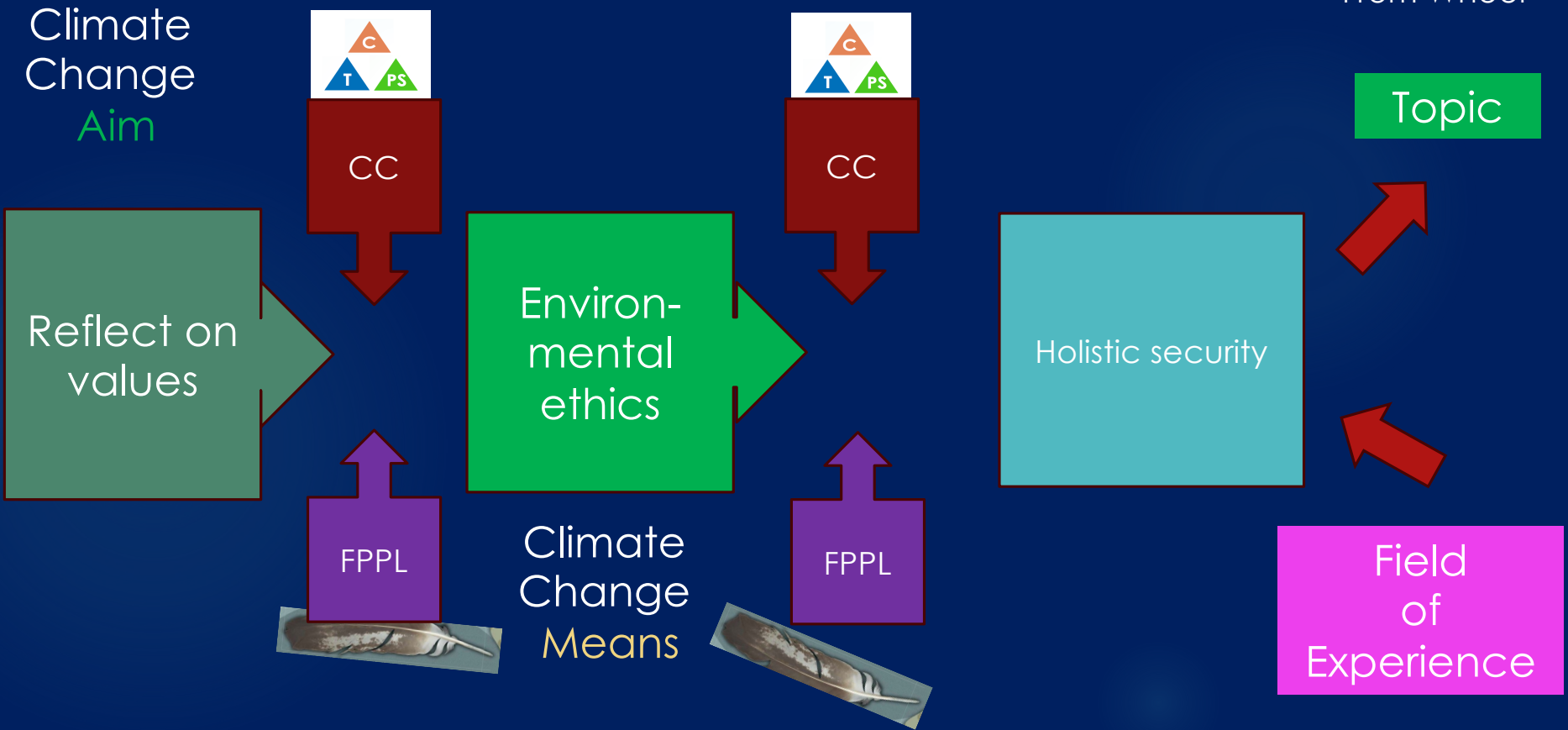
- ▶ Return to your field of experience, topic, & Core Competencies from Breakout #1
- ▶ Select ONE Climate Change aim and ONE Climate Change means (see handout)
- ▶ Connect all parts with relevant core competencies and FPPL



# In Miro: **Sorting** Aims & Means

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From Wheel



# Reporting: Back from Breakout/Miro

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Let's go to Miro  
via Share Screen



# Part 4 – Castaways & Sea Legs



**“TEACHER AGENCY”**

Aims & Means

CETE  
Climate Change  
Aims  
&  
Means



**Call to Action**  
Try tying various  
aims & means  
into your  
planning.....**yearly**  
& **units**





# CETE Workshop #3: Jan 29, 2024

## Aims and Means to Lesson Planning

- Follow up from WS#2
- Further exploration of B.C. Curriculum & climate change education – via Lessons

Mussicho!

Happy solstice!



Contact  
Info  
&  
more...

