## CIHR - IAPH

## Aboriginal Community-Based Participatory Action Research



Themes and activities within
Integrative Health & Healing:
co-learning our way to expanding
wholeness through restoration of
relationships with the land

Winter Workshop for Mi'kmaw Elders and Educators: updates & consultation 7 March 2006

















We need to stay connected to the Earth.

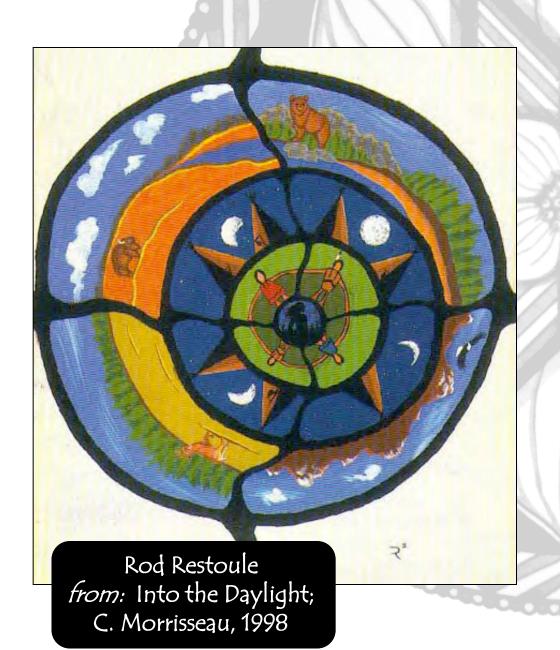
We are all interconnective.



We need to stay connected to the Earth.

Everything we want is here.

from: "Winds of Change" Roy Thomas, Ahnisnabae-born Ojibwa artist; 1949-2004



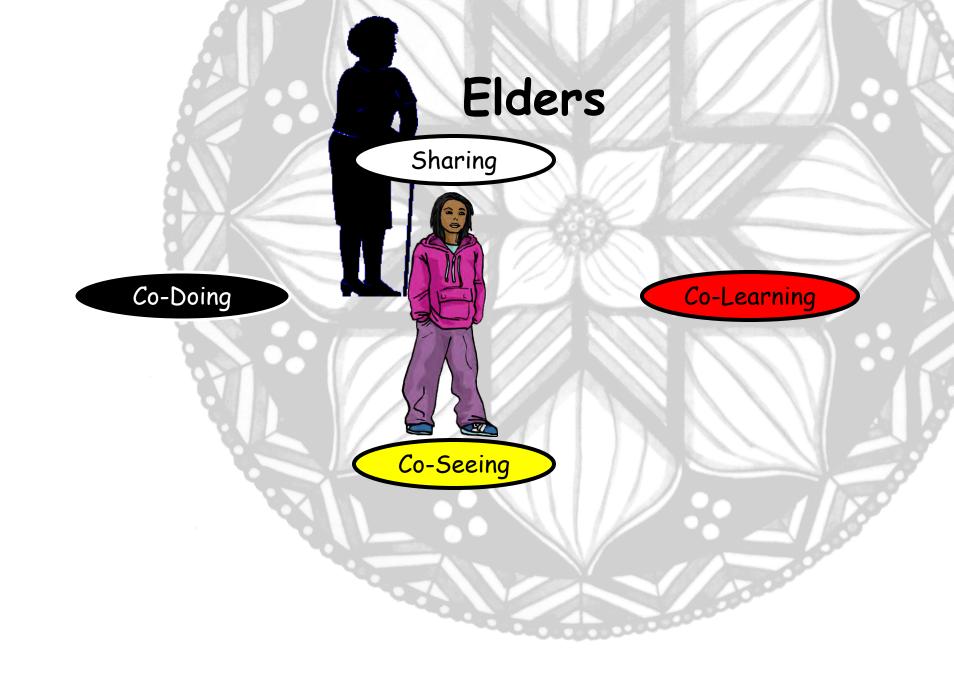
We need to stay connected to the Earth.

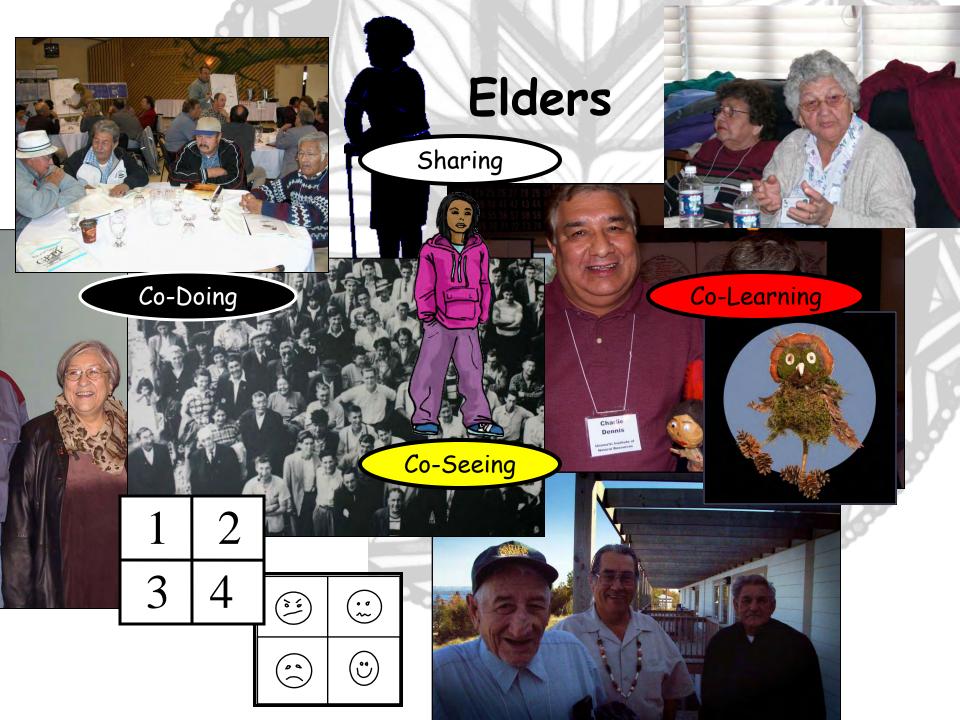
We need to be able to work with Nature ...

... not be a "master over".



If we really want our children to remain connected to this world, we have to walk the healing path with them. (Morrisseau 1999)





## Co-Learning

Go into a forest, you see the birch, maple, pine.

Look underground and all those trees are holding hands. We as people must do the same.

(late Mi'kmaq Chief, Spiritual Elder, and Healer Charlie Labrador)



Co-Learning

## Co-Learning

to create a new path of mutual trust and respect



Learn together.

Learn from each other.

Learn our common.

Learn our differences.





1. Key phrases and words



2. Biodiversity literacy





4. Mi'kmaq biocultural expression

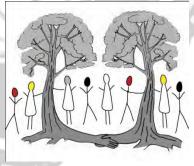


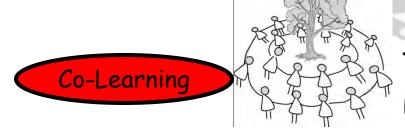
5. Spiritual connectedness with the land





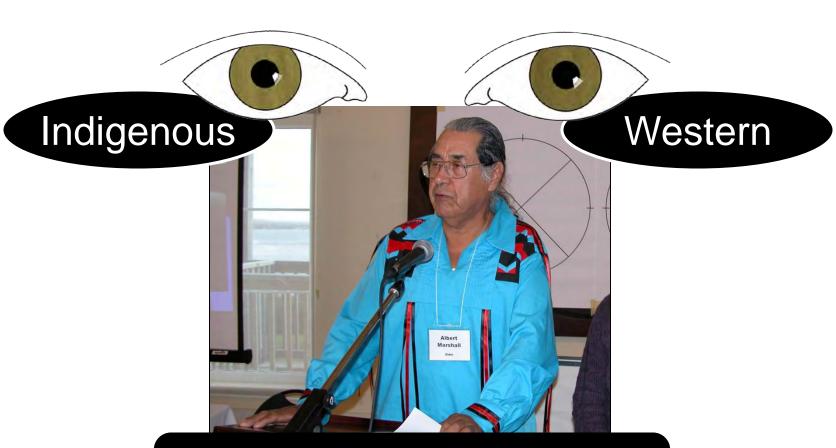
6. Integration of co-learnings into health care delivery systems





7. Extension of co-learnings into sustainable ventures

### "two-eyed seeing"



Albert Marshall, Mi'kmaq Elder Eskasoni First Nation

## "two-eyed seeing" our key concepts & actions

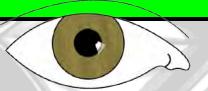


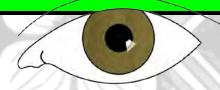
- respect
- relationship
- reverence
- reciprocity
- ritual
- repetition
- responsibility



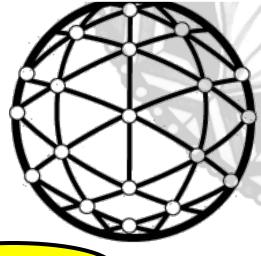
- hypothesis(making & testing)
- data collection
- data analysis
- model & theory construction

## "two-eyed seeing" how our world is

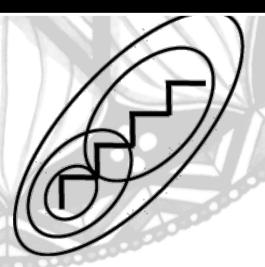




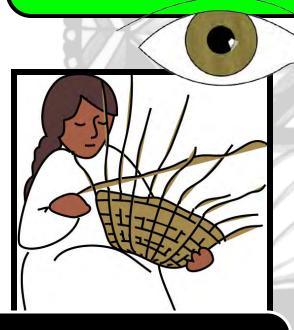
### interconnected



### parts & wholes



## "two-eyed seeing" our overall knowledge objectives

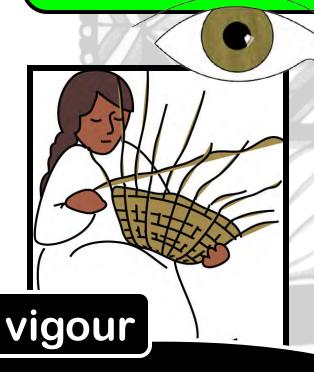


towards resonance of understanding within environment



towards construction of understanding of environment

"two-eyed seeing" our language & methodology





WEAVING

UN-WEAVING

## "two-eyed seeing"













### Mi'kmawe'k Tepknusetk

### Earth speaks: health indicators

### Kesikewiku's Keptewiku's Punamuikus 00000 Wifewill Wikumkewiku's frogs croaking eskewiku's Nipniku's Sharing

#### **ECOSYSTEM HEALTH CONSCIOUSNESS** Difference, Pattern, Variation

Toowa'tu'ki Kiijitaonn + Integrative Science

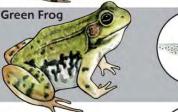
#### Frogs of Unama'ki

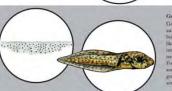






Mink Frog is green with many dark markings and is 4 - 7 cm long He gets his common name from his musky odour; he smells like a mink. Mink Frog's song sounds like pieces of wood being tapped together... TAP, TAP! While other frogs live on both land and warer. Mink Frog spends most of his life in the water. He prefers permanent bodies of water like ponds and lakes. Female Mink Frog. lays 2000 to 4000 eggs in a round jelly mass. This jelly mass is attached to an underwater plant stem or submerged twig. Mink Frog eats dragonflies, damselflies, water beetles, aphids, minnows, leeches snails, millipedes, and spiders.





#### Green Frog • Rana clamitans

Green Frog is green with gray or brown markings on her back and legs, and has a pale belly marked with dark streaks. Male Green Frog has a bright yellow throat and is 6 - 10 cm long. Green Frage song sounds like a loose hanjo string being placked, or like a small pebble dropped into water... UNGK! Green Frog prefers to be close to water, and ends to live at the edge of rivers, ponds, lakes or streams. Female Gr Frog lays 1000 to 4000 eggs in a loose jelly mass that floars on the surface of the water like a raff. Green Frog eats beetles, flies, carerpillars, grasshoppers, spiders, smalls, slugs, waterbugs, butterflies and moths, and nes other small frogs



**Northern Spring Peeper** 



#### Pickerel Frog \* Rana palustris

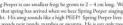
Pickerel Froe is light brown with many dark blotches on his back and legs. He is 4 - 7 cm long. Pickerel Frog's song sounds like somebody snoring, or like the sound of someone slowly pushing onen a creaky door ... ARREP ARRED! Pickerel Frog lives on the shores of ponds or lakes, or on the banks of streams, often staying near permanent bodies of water at breeding time. However, he will also live in moist fields, bogs, or damp woods. Female Pickerel Frog lays her eggs in a round jelly mass attached to a plant or stick below the surface of the water. She can lay as many as 800 to 1800 eggs at a time. Pickerel Frog eats beetles, ants, spiders, caterpillars, sow sugs, mites, snails, true bugs, and many small water creatures

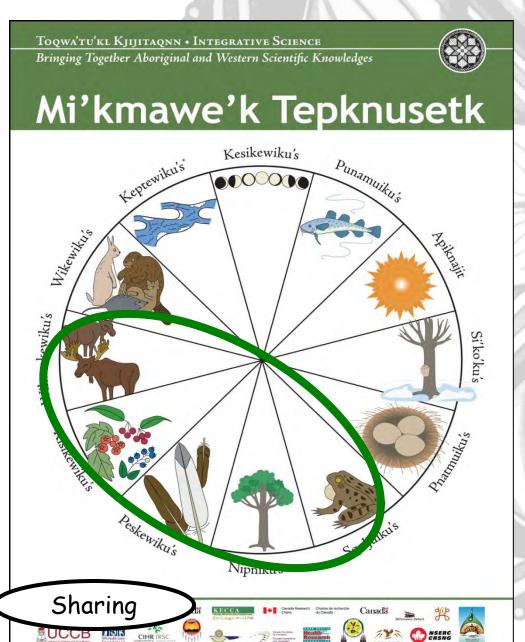


#### Eastern American Toad . Bufo americanus

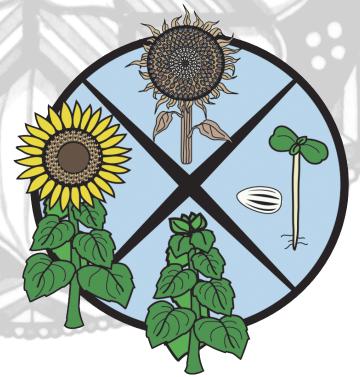
Toad is a plump creature with stubby toes and rough, warry skin. He is usually brownish, with darker brown or black markings. Toad has a pale belly with dark spots that become more distinct at night. Toad can grow to be 5 - 11 cm long. Toad lives in many different places, for example, in the woods, near a swamp or lake, in a field, or even in your backyard! His song sounds like a long, high trilling sound. ... TRRRR! Female Toad prefers temporary pools for breeding. She lays 4000 to 8000 eggs at a time in two long strings near the bottom of the pool or puddle. Toad ears many kinds of inverta like carerollars, earwigs, sow ugs, as well as slugs, carthworms, and millipedes

Spring Peeper is our smallest frog; he grows to 2 - 4 cm long. We know that spring has arrived when we hear Spring Peeper singing at night. His song sounds like a high PEEP! Spring Peeper lives

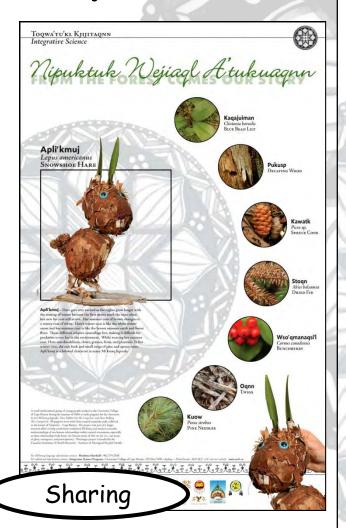




# Voices of the land ... of health



### puppet posters



Toowa'tu'kl Kijiitaonn Integrative Science



## Nipuktuk Wejiaql A'tukuaqnın



**Jikogs** Fomes fomentarius BRACKET FUNGUS

Ti'tikli Bubo virginianus GREAT HORNED OWL



Jikoqs - BRACKET FUNGUS: This hard, woody, slow growing bracket fungus once had a very special role to play in the life of the Mi'kmaq Nation. Jikoqs, Keeper of the Sacred Flame, was used to ensure that embers of the fire remained alive when the people moved to a new camp. The fungus was set on fire and then placed in a clamshell for protection. Jikoqs would burn slowly and thus keep the fire alive. At the new campsite, likogs would be used to start a new campfire - this was in the time before we had modern matches. Similarly, to ensure that the fire could be restarted every morning at the same campsite, Jikoqs and a clamshell were used to safeguard an ember each night. The species of fungus used was possibly Fomes fomentarius, which is known in English as tinder many tiny holes (tinder polypore).



Kuow Pinus strobus PINE NEEDLES



Maskwi Betula papyrifera BIRCH BARK



Wisqasaw Pinus strobus PINE CONE



Pukusip Dicranum sp. Moss

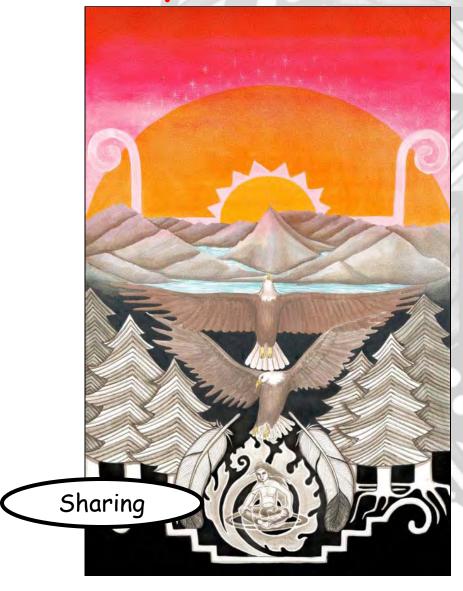


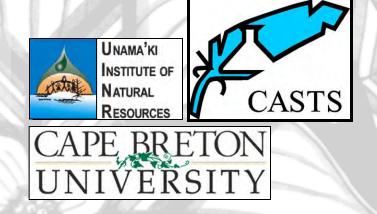
Ognn Twigs

A small multicultural group of young people worked at the University College of Cape Breton during the summer of 2004 to make puppers for the character in two Mi'kmaq legends: How Robbit Got His Long Ears and How Bollfrog

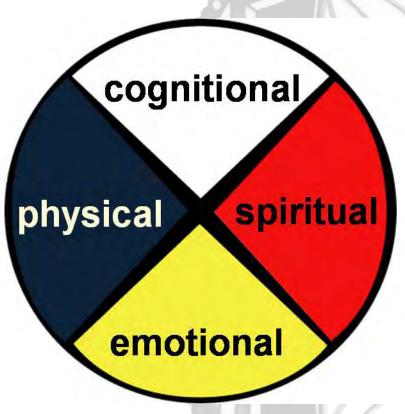


## Wjipenuk Etek Lnuimlkikno'ti Spirit of the East





East (sunrise) ... a place of beginnings and enlightenment ... where new knowledge can be created or received to bring about harmony or right relations.

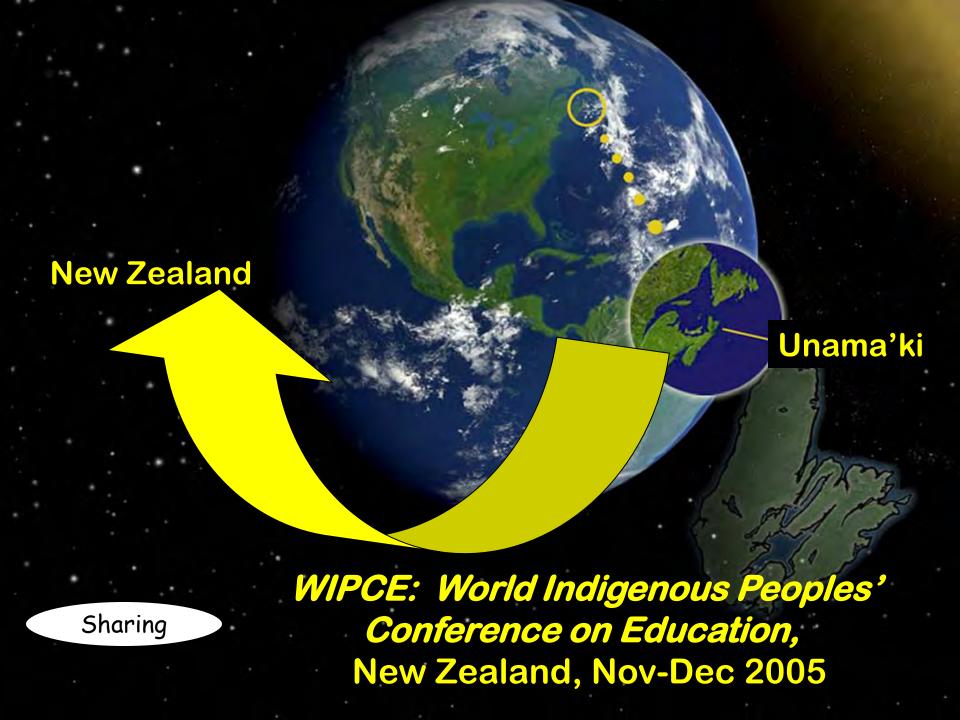


Bras d'Or Lake

Planning Initiative

Collaborative Environmental







## On Tribal Consciousness THE TREES THAT HOLD HANDS

### Murdena Marshall, MEd CANADA

Elder, Spiritual Leader, Eskasoni Mi'kmaq First Nation Associate Professor, Mi'kmaq Studies (retired, Cape Breton Univ.)



Sharing



Bringing Together
Western & Aboriginal
Scientific Knowledges



## THE SCIENCE OF HUMILITY

#### **Albert Marshall**

Elder, Eskasoni Mi'kmaq First Nation

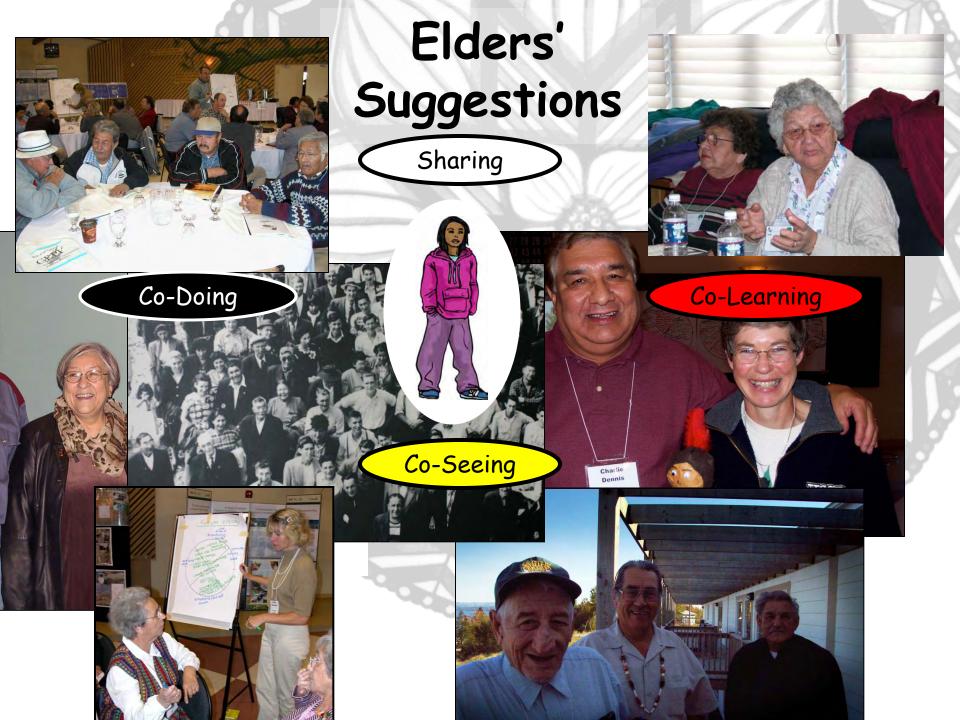
- Eskasoni Fish and Wildlife Commission
- Unama'ki Institute of Natural Resources
- Eskasoni School Board

#### Canada

## CAPE BRETON UNIVERSITY



Bringing Together
Western & Aboriginal
Scientific Knowledges



## Sense of Self within Family





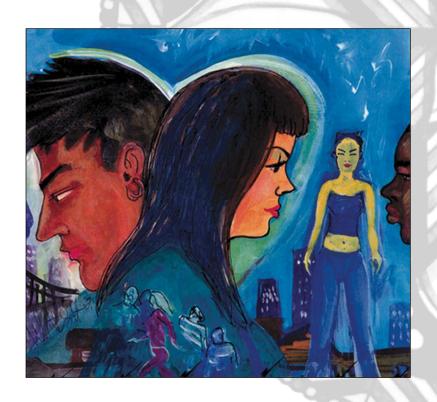


## Sense of Place

Co-Doing

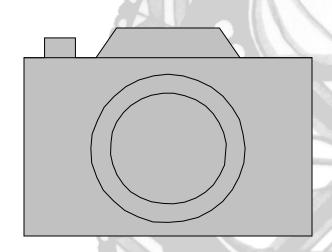


## NEMI'SIMK

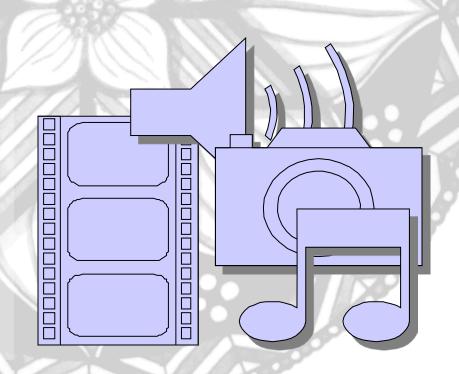




Co-Doing



Video Story:
Our Co-Learning
Journey to
Two-Eyed Seeing

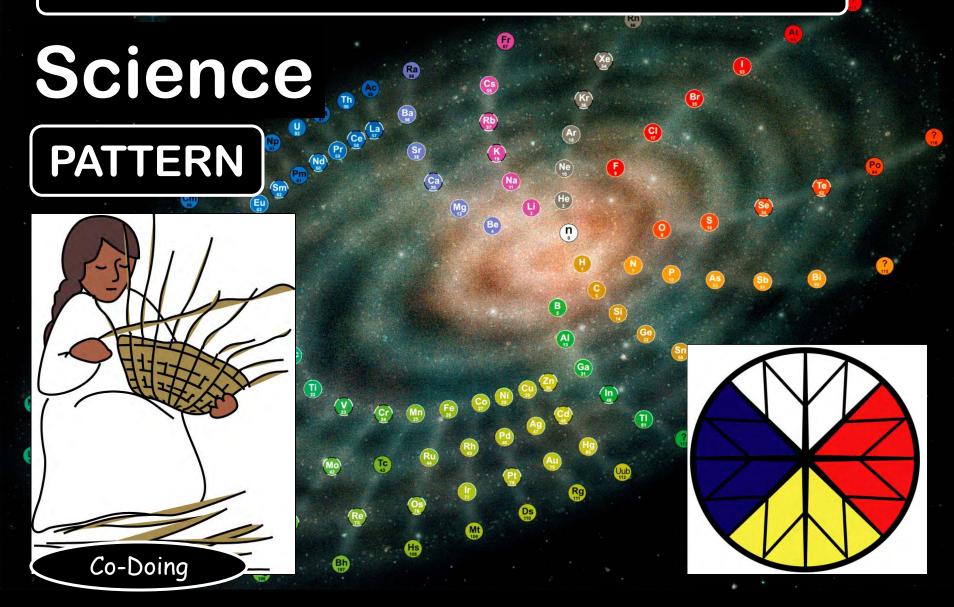


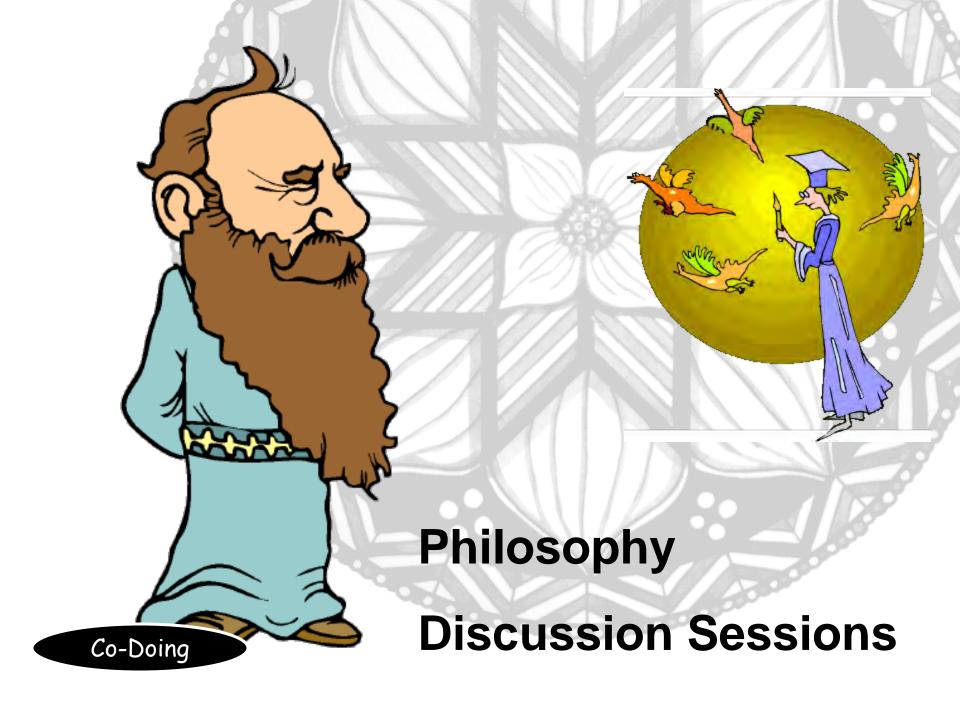


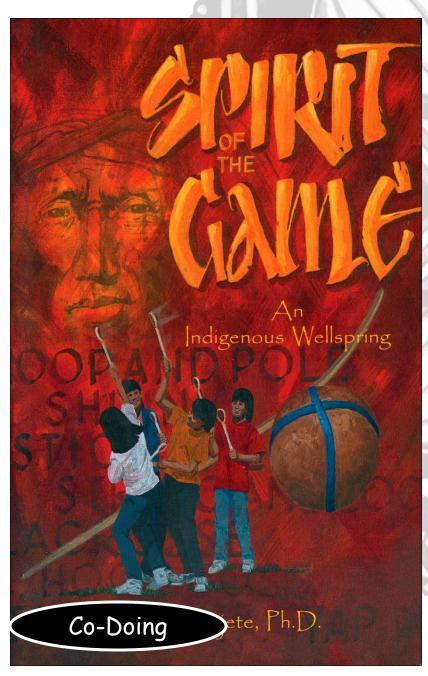
## INSTITUTE for INTEGRATIVE SCIENCE & HEALTH



stories of our interactions with and within nature

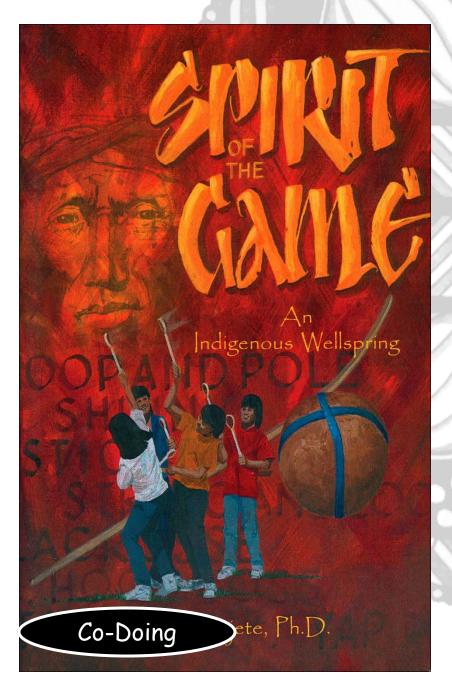






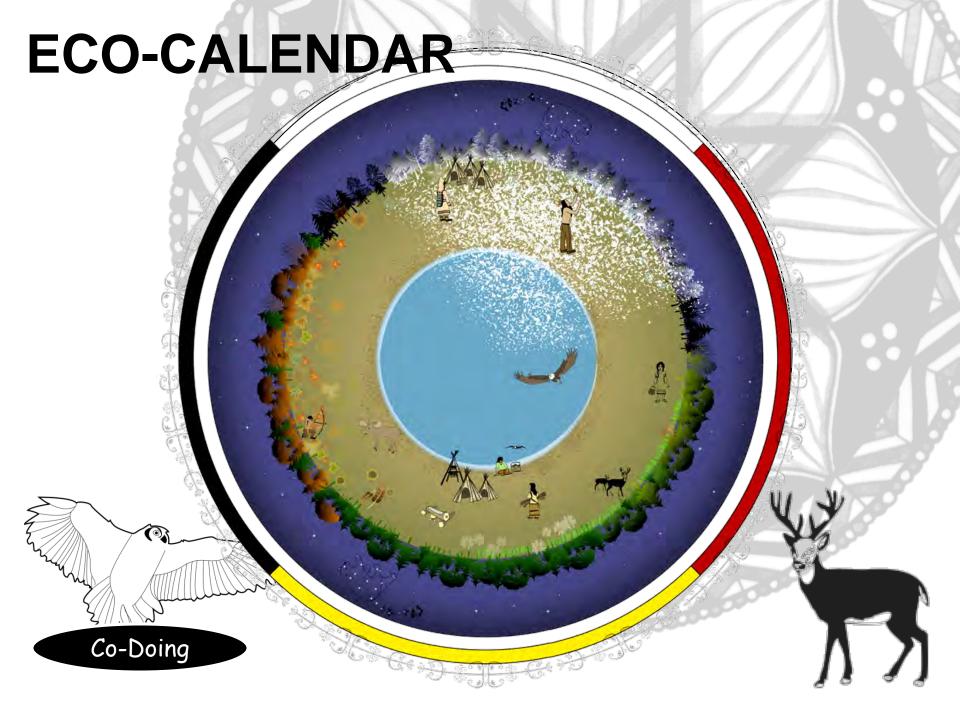
# Mathematics Workshop for Waltes



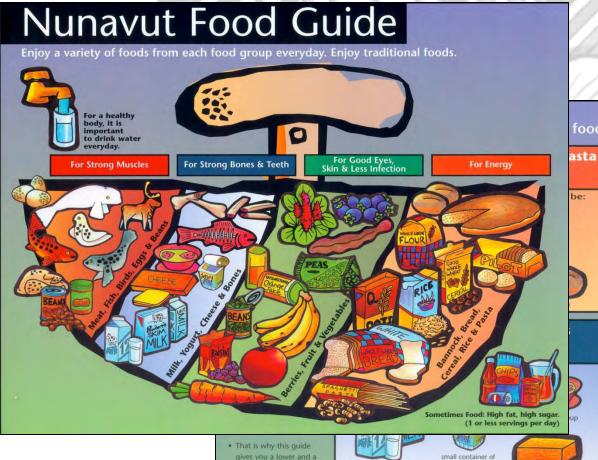


# Traditional Knowledge via computer games





### ?? Mi'kmaq Food Guide



For people age four years and older. food group everyday. Enjoy traditional foods.

Berries, Fruit & Vegetables

Aim for 5 or more servings per day Choose dark green and orange vegetables and orange fruit often 1 Serving could be any one of these: medium size fruit or vegetable handful of berries

> Like orange fruit and vegetables, blubber and organ meats are sources of vitamin A.

Meat, Fish, Birds, Eggs & Beans 2-4 servings per day



yogurt (175g) 3" x 1" x 1" piece of cheese For good health, choose low-fat foods and cooking methods.

can choose the lower number of servings, while the higher number. Most other people can choose

Co-Doing











half glass of juice (half cup)

For good health, enjoy activity as part of your everyday life.

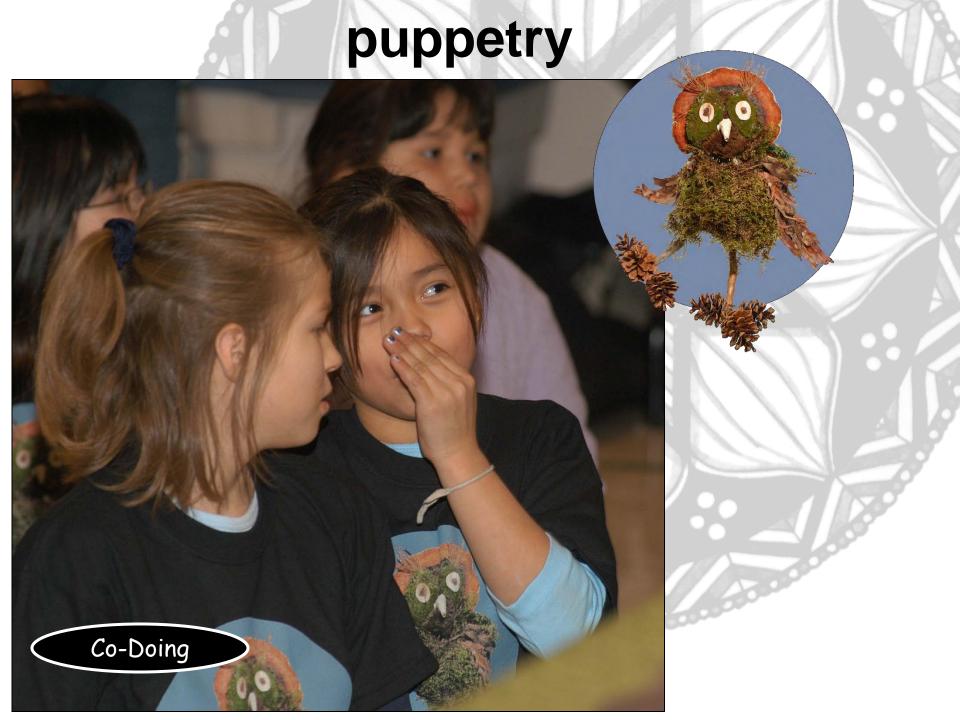
y funded by Canada Prenatal Nutrition Program: 2001

gives you a lower and a higher number of servings for most food groups.

· For example, young children male teenagers can choose somewhere in between.

glass of milk

(1 cup)

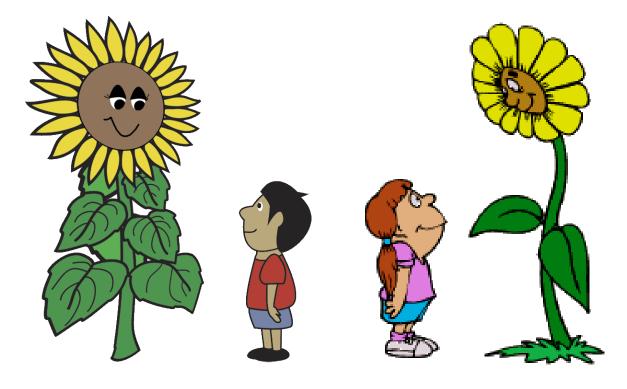




#### Toqikutimk "Growing Together" Our Children - Our Sunflowers

Andrew Sark- IWK Mi'kmaq Youth Activities Coordinator

Cape Breton University - Integrative Science Program Integrative Health and Healing Research Project





**MPF** 

http://oursunflowers.ca

## IKA TAQUTE'N SKINMIN [planting my seeds]













ikàtaqawte'n skinmin

anqute'mn









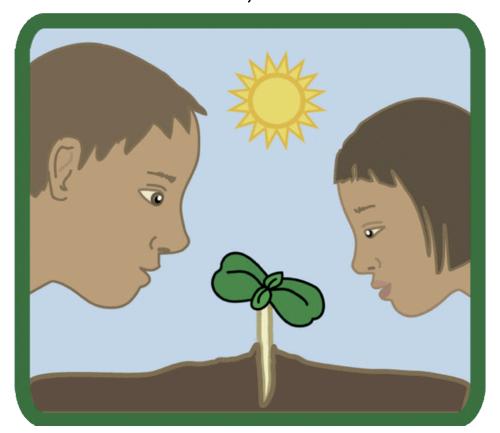
jikapte'n sqalian

a new relationship

elementary school children and their sunflowers



Njiknam Nkwe'ji'j New little brother, new little sister.



I watch, I learn, I care, I love, I grow





### Maliapte'n Ta'n Kist Ika'tu'nl ( caring for my sunflower)

wula ketusamqwakl





wula welikwek mita meski'k wtupn

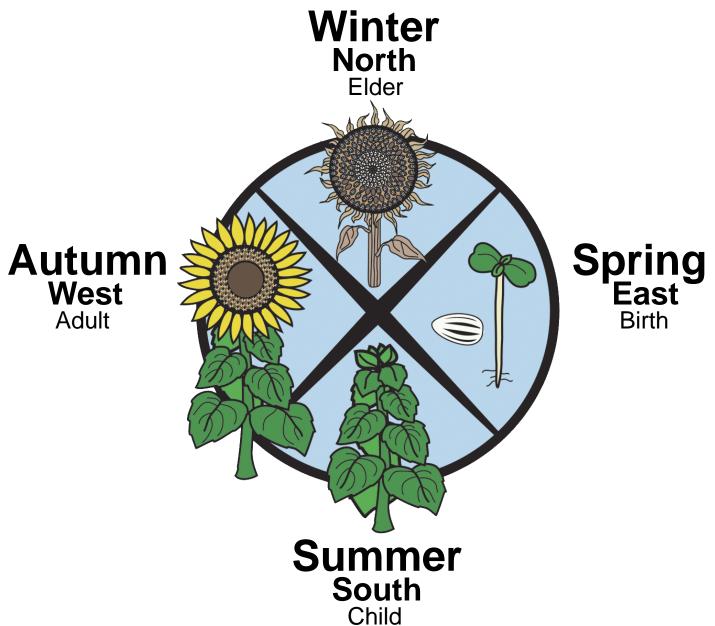








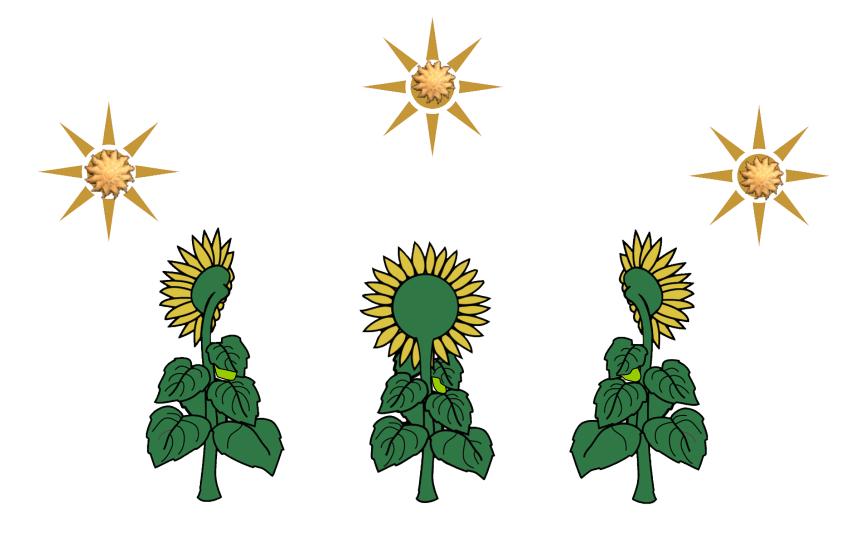
Learn and grow with the natural process of the sunflower's life cycle











follow the sun, stand proud, grow strong preventative medicine for the spirit

#### NTASUEKML AQ WTANM





CIHR IRSC

Nuji

Nitapk

friends

Kina'mua'tijik

[school teachers]





Nuji Toqomajo'tk

Mawi

Kisitaqn

[scientists]

Nuji Npitaqtijik

[health care people]

[natural resource guardians]













#### Canada Research Chairs

#### Chaires de recherche

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Social Sciences and Humanities Research Council of Canada

du Canada

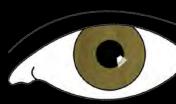
Conseil de recherches en sciences humaines du Canada



Canada Foundation for Innovation

Fondation car adjume pour l'innovation









## Thank you



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#### **Mounted Police Foundation**

Royal Canadian Mounted Police Gendarmerie royale du Canada

