



moving forward with
ELDERS' RECOMMENDATIONS
 from APCFNC Elders Research Project
“Honouring Traditional Knowledge”
 • considerations from **TWO-EYED SEEING** and **CO-LEARNING** •

Artist Gerald Gloade; Millbrook First Nation

Artist Gerald Gloade
Millbrook First Nation

TWO-EYED SEEING

and

CO-LEARNING

Honouring Traditional
Knowledge in Academia

Murdena & Albert Marshall
 Elders & Doctors of Letters, *honoris causa*; Eskasoni community, Mi'kmaq Nation
 APCFNC Elders Project – Elder participants and Advisory Committee members
albertdmarshall@ns.sympatico.ca

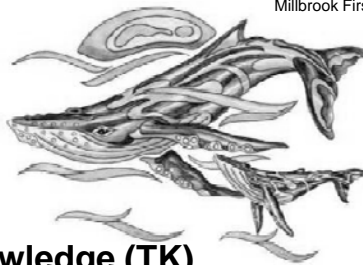
Cheryl Bartlett
 Canada Research Chair in Integrative Science; Professor of Biology
 APCFNC Elders Project – Advisory Committee member
cheryl_bartlett@cbu.ca; www.integrativescience.ca

KECCA
 Knowledge, Education and Culture Collaborative Association
**CAPE BRETON
 UNIVERSITY**

(presentation for AAEDIRP's university partners & others, 30 March 2012, Cole Harbour, NS)

OUTLINE OF PRESENTATION

Artist Gerald Gloade
Millbrook First Nation



1. Introduction

- goal and acknowledgements
- APCFNC and AAEDIRP

2. Honouring Traditional Knowledge (TK)

- APCFNC's Elders Project
- project results: Elders' recommendations regarding TK
- TK currently in academia

3. Two-Eyed Seeing (TES) and Co-Learning for TK

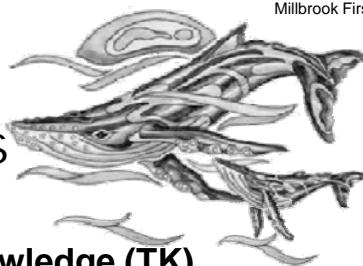
- TES: guiding principle for different worldviews working together
- TES: uptake across Canada (examples)
- TES: Mi'kmaw TK (some explanation)
- TES: Co-Learning in Transdisciplinary Research

4. Moving Forward with Elders' Recommendations

- encouraging AAEDIRP's university partners (and others)

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Artist Gerald Gloade
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1. Introduction

- acknowledgements and goal
- APCFNC and AAEDIRP

2. Honouring Traditional Knowledge (TK)

- APCFNC's Elders Project
- Project Results: Elders' Recommendations regarding TK
- TK currently in academia: status, challenges, visions


3. Two-Eyed Seeing (TES) and Co-Learning for TK

- TES: guiding principle for different worldviews working together
- TES: uptake across Canada (examples)
- TES: Mi'kmaw TK (some explanation)
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Artist Gerald Gloade
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OUTLINE OF
PRESENTATION

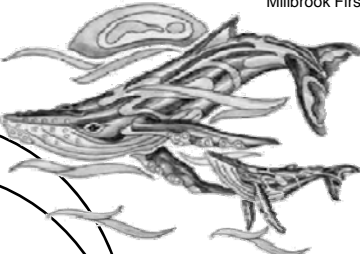
RELATIONSHIPS

RESEARCH
RECOMMENDATIONS

RE-VISIONING

RENEWAL

Artist Gerald Gloade
Millbrook First Nation



LET'S ALL HELP
EACH OTHER

RELATIONSHIPS

RESEARCH
RECOMMENDATIONS

RE-VISIONING

RENEWAL

LET'S ALL HELP EACH OTHER

Artist Gerald Gloade
Millbrook First Nation

CO-LEARNING JOURNEY
guided by
TWO-EYED SEEING

Canada Research Chairs / Chaires de recherche du Canada

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

Canada
Canada

Thank you / Wela'lioo

CAPE BRETON UNIVERSITY

IAPH
CIHR IRSC
Canadian Institutes of Health Research / Instituts de recherche en santé du Canada

NSERC
CRSNG

Canada Foundation for Innovation / Fondation canadienne pour l'innovation

MANY ELDERS

Membertou Elementary

AAEDIRP

NOVA SCOTIA Health Research Foundation

IWK Health Centre Foundation

ABORIGINAL Health Access Program

Mikmawey Debert

SABLE OFFSHORE ENERGY INCORPORATED

Mermaid Theatre of Nova Scotia

Eskasoni First Nation Detachment
Royal Canadian Mounted Police / Gendarmerie royale du Canada


Mikmawey College Institute
Mikmawey Espi Aihra'matno'kuom

MY MEMBERS


The support of various partners and funding agencies is gratefully acknowledged.

Artist Gerald Gloade; Millbrook First Nation

Spirit of the East
Light
Beginnings
Renewal
Hope
Courage



**GOAL: encouragement towards uptake of
Elders' Recommendations**
(from APCFNC Research Project)
by AAEDIRP's university partners (and others)



Atlantic Policy Congress
Of First Nations Chiefs Secretariat
www.apcfnc.ca

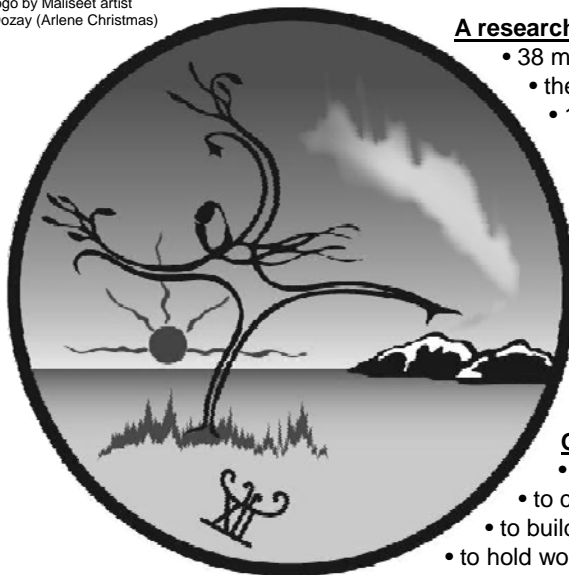
APCFNC

The APC Secretariat is an advocate for speaking with one voice on behalf of First Nations communities. Through research and analysis, we develop and table policy alternatives for matters affecting First Nations communities in Atlantic Canada, Quebec, and Maine. Our mandate is to "research, analyze and develop alternatives to federal policies that affect the Mi'kmaq, Maliseet, Innu and Passamaquoddy First Nations in the Atlantic region."

strategic areas of focus for change:
economic opportunities; housing and infrastructure; health; education; relationships; closing the gap between First Nations communities and Canadians

source: <http://www.apcfnc.ca/>

logo by Maliseet artist
Dozay (Arlene Christmas)



A research program partnership:

- 38 member communities of APC
- the Inuit
- 12 Atlantic universities
- 4 government funders, both federal and provincial

Purpose:

to improve the knowledge base of Atlantic Aboriginal economic development, in order to improve the lives of the Aboriginal people in the region

Objectives:

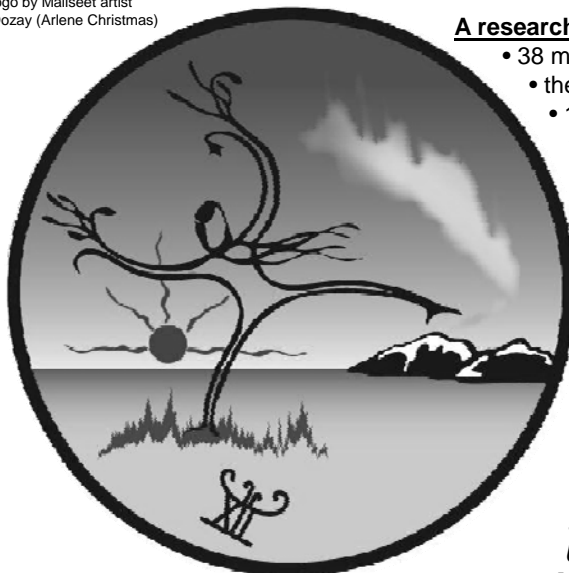
- to conduct research
 - to create a database
 - to build Aboriginal research capacity
 - to hold workshops
- on Aboriginal economic development

AAEDIRP

Atlantic Aboriginal Economic Development Integrated Research Program

source: <http://www.apcfn.ca/>

logo by Maliseet artist
Dozay (Arlene Christmas)



A research program partnership:

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UNIVERSITY PARTNERS

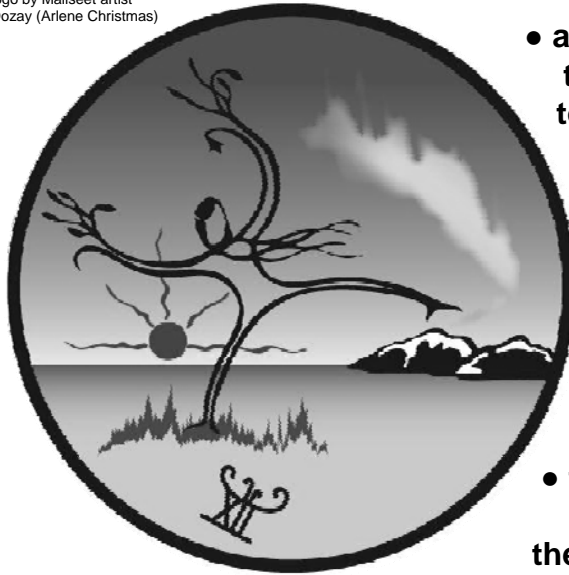
*Dalhousie University
St. Thomas University
Acadia University
Saint Mary's University
Memorial University
Université de Moncton
Mount Allison University
Cape Breton University
University of PEI
St. Francis Xavier University
University of New Brunswick
Mount Saint Vincent University*

AAEDIRP

Atlantic Aboriginal Economic Development Integrated Research Program

source: <http://www.apcfn.ca/>

logo by Maliseet artist
Dozay (Arlene Christmas)



- a tree extending across the water, signifying to reach and to teach
 - the sun, representing the People of the Dawn
 - the double curve, commonly used within the Wabanaki tribes
 - the snow-capped mountains and the Northern Lights, representing the Innu and Inuit

AAEDIRP

Atlantic Aboriginal Economic Development Integrated Research Program

logo by Maliseet artist
Dozay (Arlene Christmas)



Land Cover Classes	
[Dark Green]	Coniferous Forest
[Medium Green]	Broadleaf Forest
[Light Green]	Mixed Forest
[Dark Grey]	Transition/Tread Shrubland
[Light Grey]	Wetland/Shrubland
[White]	Grassland
[Light Blue]	Tundra
[Dark Blue]	Shrubland
[White]	Open/Sea

AAEDIRP

Atlantic Aboriginal Economic Development Integrated Research Program

logo by Maliseet artist Dozay (Arlene Christmas)

Natural Resources Canada / Ressources naturelles Canada

Honouring Traditional Knowledge

an APCFNC research project* within AAEDIRP's objectives:

- to conduct research
- to create a data base
- to build research capacity
- to hold workshops

... on Aboriginal economic development

AAEDIRP
Atlantic Aboriginal Economic Development Integrated Research Program

logo by Maliseet artist Dozay (Arlene Christmas)

Artist: Gerald Gloade, Millbrook First Nation

words of Elder Mordena Marshall

Traditional Knowledge

was never meant to be static and stay in the past.

Rather, we must bring it into the present so that everything becomes meaningful in our lives and in our communities.

... on Aboriginal economic development

AAEDIRP
Atlantic Aboriginal Economic Development Integrated Research Program


Artist Gerald Gloade; Millbrook First Nation

**APCFNC Elders
Research Project**

Honouring Traditional Knowledge

The project was initiated because of the critical importance of consulting with Elders and having their perspectives included in community economic development projects and in research on Aboriginal economic development. Elders determined the process and outcomes for the project. The project was supported by APCFNC staff and Aboriginal community members. As a foundation for the work on economic development research, APCFNC sought guidance from Atlantic region Elders on how they would like to be consulted when sharing Traditional Knowledge and Aboriginal worldviews. As part of the project, the Elders have made eight recommendations concerning Traditional Knowledge and its importance.

source: APCFNC Elders Project (handout)



Artist Gerald Gloade; Millbrook First Nation

**APCFNC Elders
Research Project**

Honouring Traditional Knowledge

RESEARCH PROCESS:


Elders Mawio'mi
12-14 August 2010, Millbrook FN

Elders asked that this be videotaped and a transcript be made for educational purposes.

"Elders' Recommendations" list made, based on discussions.

**Let's All Help Each Other
Moncton Conference**
16-18 March 2011

Elders discussed and approved list of eight "Elders' Recommendations".





Artist Gerald Gloade; Millbrook First Nation

APCFNC Elders Research Project

Honouring Traditional Knowledge

RESEARCH PROCESS:

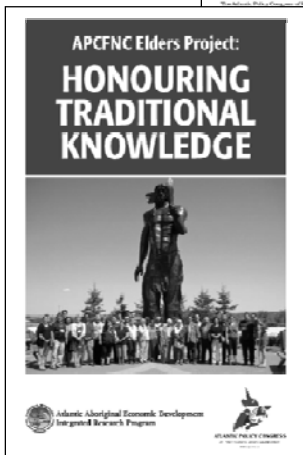




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www.apcnc.ca

PROJECT REPORT

<http://www.apcnc.ca/en/resources/HonouringTraditionalKnowledgeFinal.pdf>



ELDER'S RECOMMENDATIONS

The following list of recommendations from the APCFNC Elders Project (Honouring Traditional Knowledge) is intended to provide a starting point for the development of a national strategy for the protection and promotion of traditional knowledge in Canada.

BACKGROUND


The APCFNC Elders Project (Honouring Traditional Knowledge) was initiated by the APCFNC in 2008. The project was a response to the call for action in the 2008 National Aboriginal Research Program (NAR) report, which called for the development of a national strategy for the protection and promotion of traditional knowledge in Canada.

ELDER'S RECOMMENDATIONS

The following list of recommendations from the APCFNC Elders Project (Honouring Traditional Knowledge) is intended to provide a starting point for the development of a national strategy for the protection and promotion of traditional knowledge in Canada.


ELDER'S RECOMMENDATIONS

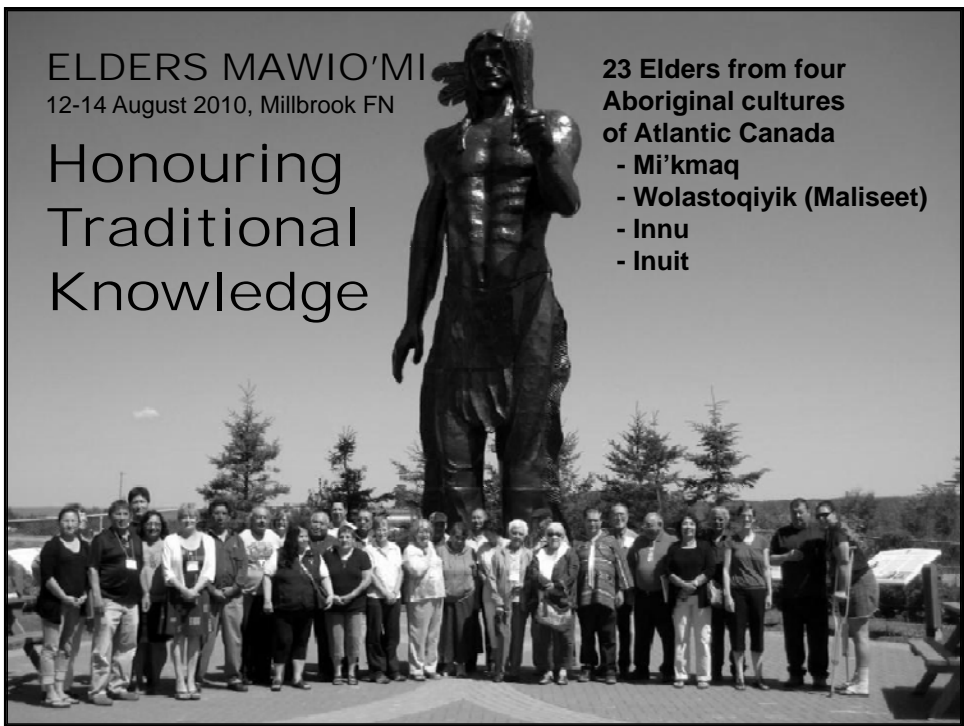
The following list of recommendations from the APCFNC Elders Project (Honouring Traditional Knowledge) is intended to provide a starting point for the development of a national strategy for the protection and promotion of traditional knowledge in Canada.



FOR MORE INFORMATION PLEASE CONTACT:

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Fax: 902.420.1112
Email: gillean@apcnc.ca





ELDERS MAWIO'MI
12-14 August 2010, Millbrook FN

Honouring
Traditional
Knowledge

23 Elders from four
Aboriginal cultures
of Atlantic Canada
- Mi'kmaq
- Wolastoqiyik (Maliseet)
- Innu
- Inuit







MAWI WIQSONULTINE * MAMU UAUITSHITUTUA
MAWI APO'QNMATULTINEJ * LLONNATAIKAJUTTIGELAUTTA

LET'S ALL HELP EACH OTHER: A CONFERENCE ON ABORIGINAL COMMUNITY-BASED RESEARCH
MARCH 16-18, 2011 – CROWNE PLAZA HOTEL, MONCTON, NEW BRUNSWICK

Elder Gwen Bear (1948-2012)



MAWI WIQSONULTINE * MAMU UAUITSHITUTUA
MAWI APO'QNMATULTINEJ * LLONNATAIKAJUTTIGELAUTTA
LET'S ALL HELP EACH OTHER: A CONFERENCE ON ABORIGINAL COMMUNITY-BASED RESEARCH
MARCH 16-18, 2011 – CROWNE PLAZA HOTEL, MONCTON, NEW BRUNSWICK



Artist Gerald Gloade
Millbrook First Nation



Artist Gerald Gloade; Millbrook First Nation

Elders
Wisdom
Thinking
Understanding
Analyzing
Integration

Light
Beginnings
Renewal
Hope
Courage

Darkness
The unknown
Perseverance
Reflection
Respect for others' beliefs

Generosity
Determination
Goal setting
Ability to set aside strong feelings in order to serve others

North
South
East
West


Artist Gerald Gloade; Millbrook First Nation

text from: The Sacred Tree, 1984, Bopp et al.

APCFNC Elders
Research Project


Honouring Traditional Knowledge

Artist Gerald Gloade; Millbrook First Nation



ELDERS' RECOMMENDATIONS

Therefore it be resolved that the Atlantic Chiefs, having reviewed the recommendations at their meeting on 29 September 2011 hereby support the 8 recommendations put forward by Atlantic Region Elders as part of the APC Elders Project: Honouring Traditional Knowledge.




Atlantic Policy Congress
Of First Nations Chiefs Secretariat
www.apcfnc.ca

**The following is a list of the eight
ELDERS' RECOMMENDATIONS
from the APCFNC Elders Project*
“Honouring Traditional Knowledge”.**

**It is an initial list concerning how Elders would like
to be consulted when sharing Traditional Knowledge.**

Reading and acknowledging this list of recommendations should not be considered a form of consultation with Atlantic Aboriginal communities.

* project report: <http://www.apcfnc.ca/en/resources/HonouringTraditionalKnowledgeFinal.pdf>



ELDERS' RECOMMENDATIONS

1. It needs to be recognized that Atlantic Aboriginal communities are losing their Elders, their languages and their cultural knowledge very rapidly. Therefore, Aboriginal communities and leadership need to recognize the urgency and importance of working alongside Elders and learning from their Traditional Knowledge immediately.



ELDERS' RECOMMENDATIONS

2. It is imperative that Elders be involved in all aspects of the territorial, cultural, linguistic, ecological, economic development and social affairs of Atlantic Aboriginal communities. Elders are in a position to help prioritize what is most important because of their collective cultural knowledge.



ELDERS' RECOMMENDATIONS

3. Traditional Knowledge should be woven into all aspects of Aboriginal community life, including economic development, fisheries, health, social, law, environment and education, etc.



ELDERS' RECOMMENDATIONS

4. Elders should be consulted in meaningful ways and have advisory roles for all Aboriginal community planning, development, implementation and evaluation taking place. Meaningful involvement would include being members of steering committees and advisory committees so that Elders have input into decision making.



ELDERS' RECOMMENDATIONS

5. Traditional Knowledge must be shared and passed on before it is lost. The ways in which Traditional Knowledge is passed on, needs to be directed by the Elders from each territory.



ELDERS' RECOMMENDATIONS

6. An Elders Council, appointed by Elders, that would advise on matters related to the sharing of Traditional Knowledge, should be formed for the Atlantic region.

The Council would advise on matters related to protocols and/or ethics and the best practices for the sharing of Traditional Knowledge as well as the best practices for working alongside Elders. This would include working alongside Elders in all areas of community life and development including research.



The Elders Council, once formed, would engage in a process of co-learning with the Atlantic region universities to create a template for how the process of this knowledge transfer could occur.

ELDERS' RECOMMENDATIONS

7. Elders should be involved in developing and approving educational curriculum related to Traditional Knowledge for Aboriginal community schools, provincial and post-secondary institutions in the Atlantic region.

Traditional Knowledge should be woven into the social studies, science and language curriculum for primary and secondary schools in Atlantic Aboriginal communities. This would ensure proper and meaningful education for Aboriginal learners, enable the communities to develop a balance between western and Aboriginal learning methods and better prepare Aboriginal children for their future paths.



Post-secondary institutions should be compelled to seek guidance from the Elders Council (described above in # 6) to develop appropriate curriculum related to Traditional Knowledge for relevant post-secondary programming.

ELDERS' RECOMMENDATIONS

8. Each Aboriginal community needs to encourage the use of traditional practices, which are products of Traditional Knowledge. This would encourage younger generations to learn about and respect traditional practices, such as traditional laws, cultural and spiritual practices, language learning and practices related to hunting and fishing, food gathering, medicine, ecology, science, arts and education.





APCFNC ELDERS PROJECT RECOMMENDATIONS

Artist Gerald Gloade
Millbrook First Nation

Elder Carolyn Gould (1919-2011)



CEPI Workshop October 2004

“Well, hurry up ...
before we are
all dead.”

*request by Elder Carolyn
and many other Elders*

**KNOWLEDGE IS SPIRIT.
It is a Gift passed on through many people.
We must pass it on.**

*words of
Elder Albert Marshall*

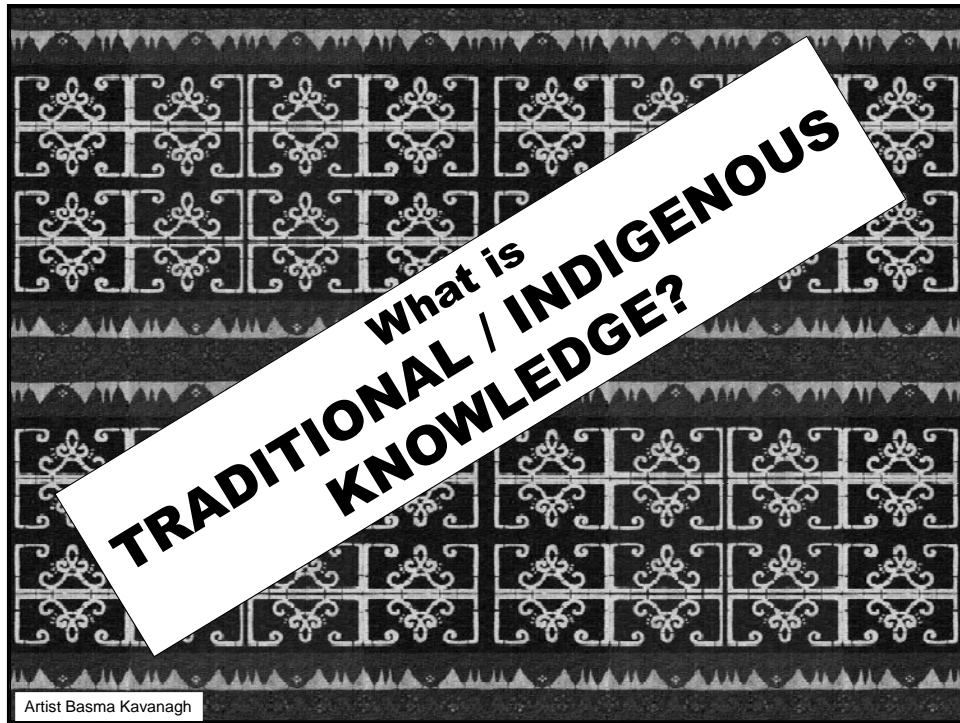


Artist Gerald Gloade; Millbrook First Nation

**EMPHASIZE: We must bring Traditional Knowledge into the present
so that everything becomes meaningful in our lives and communities.**



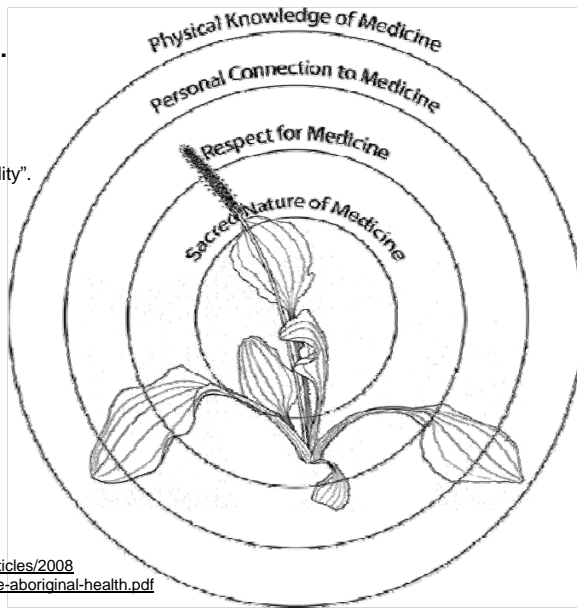
Artist Gerald Gloade
Millbrook First Nation



Traditional Knowledge (circle layers model)

from:
Murdena Marshall. 2008.

*Health and Healing –
Death and Dying:
women's roles within;
Workshop Training Materials for
"cultural sensitivity and cultural humility".



* document available at:
<http://www.integrativescience.ca/uploads/articles/2008-Murdena-cultural-sensitivity-humility-module-aboriginal-health.pdf>

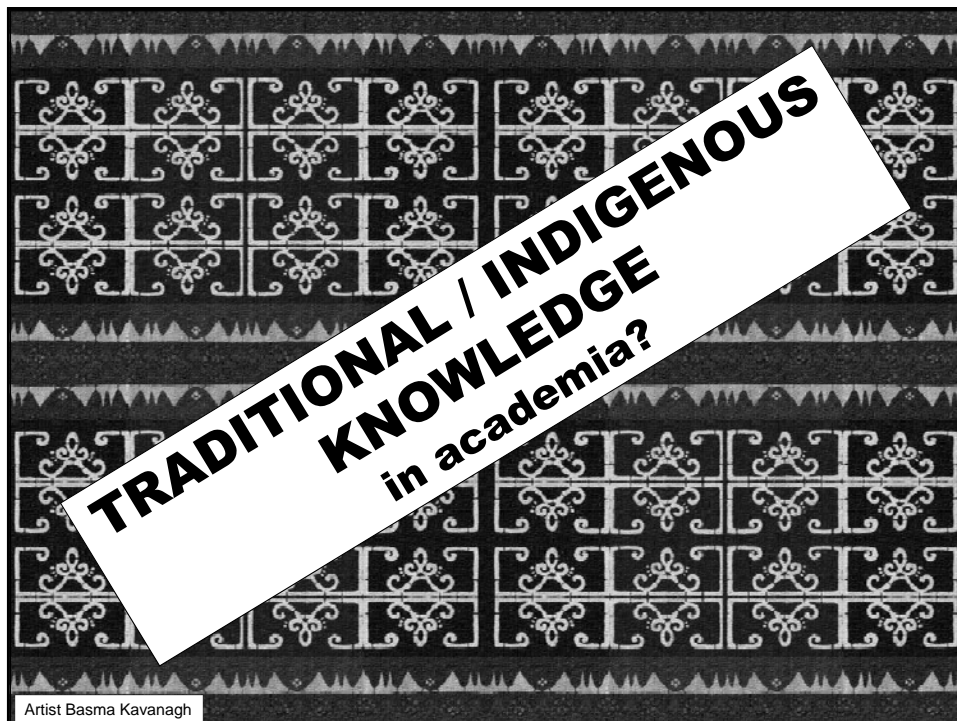
article: Ganigonhi:oh: The Good Mind Meets the Academy
in: Canadian Journal of Native Education, 2008, Vol. 31: 84-197.
by: Dr. David Newhouse, Chair of Indigenous Studies, Trent University
 Onondage from the Six Nations of the Grand River, ON

Through the process of decolonization, we as Indigenous peoples come to the table with something of value to offer to the world. This something has come to be called *Indigenous Knowledge* (IK). IK is the knowledge that we have developed over generations: the theories of the universe and how it works; the nature of human beings and others; the nature of society and political order; the nature of the world and how to live in it; and human motivation among other aspects of life. This knowledge has been transmitted from generation to generation, thought about, discussed, refined, discarded, reinforced, and subjected to continual analysis and testing. It has not been static. IK shows how to live in a world of continual change for it is based on a foundational philosophical tenet: the world is constantly in process of transformation and movement. (p.187)



complete article available at:

<http://blogs.mtroval.ca/fwiddowson/files/2010/04/The-good-mind-meets-the-academy-Newhouse.pdf>



Artist Basma Kavanagh

**In the current climate within the university,
Indigenous knowledges remain relegated to the margins.**

from: *Haig-Brown, C. 2008. *Journal of the Canadian Association for Curriculum Studies*, 6(2): 8-24. (p. 15);
*non-aboriginal scholar, York University



Artist Gerald Gloade
Millbrook First Nation

“Outside of indigenous scholarship itself, within academic circles little serious attention has been paid to examining the possibilities inherent in indigenous ontologies”. However, any move to universalise Indigenous belief systems or world view, must also acknowledge that “... ontologies are relative and that the particularities and historicity of indigenous peoples and nations ... give rise to unique characteristics and differences ...”.

(quoting Stewart-Harawira, Maori scholar, 2005, pp. 34-35)

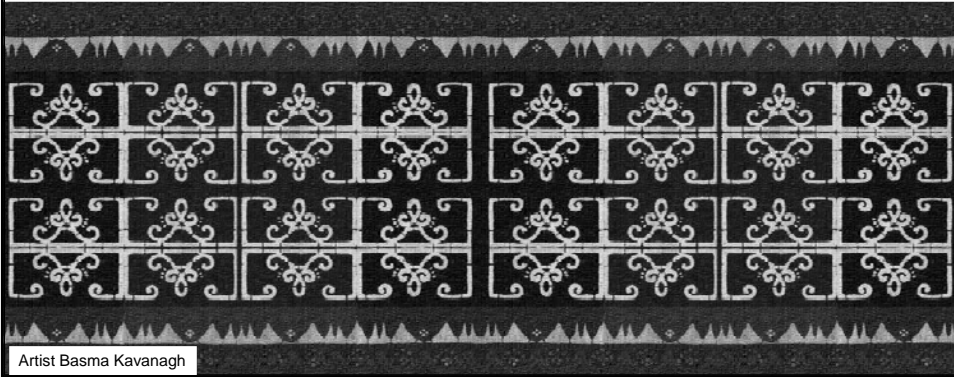
from: *Haig-Brown, C. 2008. *Journal of the Canadian Association for Curriculum Studies*, 6(2): 8-24. (p. 17);
*non-aboriginal scholar, York University



Artist Gerald Gloade; Millbrook First Nation

**TRADITIONAL / INDIGENOUS KNOWLEDGE
status, challenges, visions ... TK / IK in academia**

- what does an Elder with AAEDIRP's Project say?
- what do some Mi'kmaw university students say?
 - what do some researchers and literature say?
- what do/did the AFN and CCL-AbLKC envision?
 - what does some CBU experience reveal?



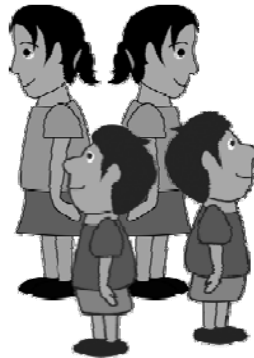
Elder Albert Marshall

holistic health

Today ... Mi'kmaw and other Aboriginal youth
are poised on the edge of two worlds.

Indigenous

Western



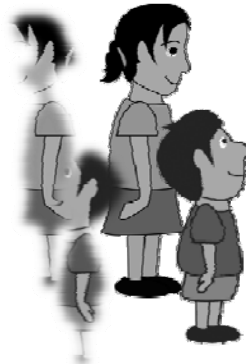
from: "Lifelong Learning: From Youth to Elder"; 2009 AAEDIRP CONFERENCE ON ABORIGINAL EDUCATION
<http://www.integrativescience.ca/uploads/articles/2009March-Bartlett-Marshall-Integrative-Science-Two-Eyed-Seeing-education-Aboriginal-lifelong-learning.pdf>

Elder Albert Marshall

holistic health

Today ... Mi'kmaw and other Aboriginal youth
are losing their cultural connections.

Indigenous



Western

from: "Lifelong Learning: From Youth to Elder"; 2009 AAEDIRP CONFERENCE ON ABORIGINAL EDUCATION
<http://www.integrativescience.ca/uploads/articles/2009March-Bartlett-Marshall-Integrative-Science-Two-Eyed-Seeing-education-Aboriginal-lifelong-learning.pdf>

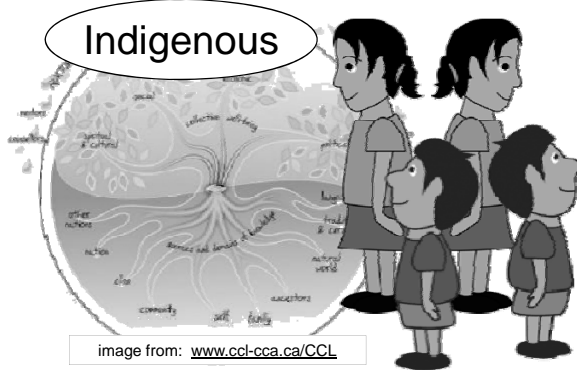
Elder Albert Marshall

holistic health

**And, yet ... we know that health
(of individuals and communities)
and transmission of TK are strongly related.**

(additional sources: many other Elders; some academic research, e.g. Chandler and Lalonde 2008)

Indigenous



Western

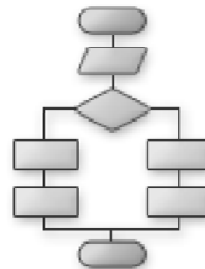


image from: www.ccl-cca.ca/CCL

from: "Lifelong Learning: From Youth to Elder"; 2009 AAEDIRP CONFERENCE ON ABORIGINAL EDUCATION
<http://www.integrativescience.ca/uploads/articles/2009March-Bartlett-Marshall-Integrative-Science-Two-Eyed-Seeing-education-Aboriginal-lifelong-learning.pdf>

Elder Albert Marshall

holistic health

When you force people to abandon their ways of knowing, their ways of seeing the world, you literally destroy their spirit and once that spirit is destroyed it is very, very difficult to embrace anything – academically or through sports or through arts or through anything – because that person is never complete. But to create a complete picture of a person, their spirit, their physical being, their emotions, and their intellectual being ... all have to be intact and work in a very harmonious way.



Artist Gerald Gloade; Millbrook First Nation

from: Bartlett, C., Marshall, M., Marshall, A., and Iwama, M.

Integrative Science and Two-Eyed Seeing: Enriching the Discussion Framework for Healthy Communities
Chapter 3 in forthcoming book: "Beyond Intractability: convergence and opportunity at the interface of environmental, health and social issues"; edited by: Lars K. Hallstrom, Nicholas Guehlstorf, and Margot Parkes. UBC Press.

[http://www.integrativescience.ca/uploads/articles/2012-Bartlett-Marshall-Iwama-Integrative-Science-Two-Eyed-Seeing-enriching-discussion-framework\(authors-draft\).pdf](http://www.integrativescience.ca/uploads/articles/2012-Bartlett-Marshall-Iwama-Integrative-Science-Two-Eyed-Seeing-enriching-discussion-framework(authors-draft).pdf)

Ashley Julian

curricular inclusiveness

- stated in Jan 2010, when Senior Undergraduate, Dalhousie University
- graduated Oct 2011, BA Political Science, Dalhousie University
- Indian Brook community, Mi'kmaw Nation

I may have taken only five courses [at university] where teachers were able to teach me about my people; I'm not born knowing my history. My family only has a small proportion of it. It was stripped from my Grandparents so they were shy to acknowledge that ... you know ... I'm Mi'kmaq.

(quoted with permission, March 2012)



Artist Gerald Gloade; Millbrook First Nation

from: video "First Nations Youth Guiding Youth: Accessing & Surviving Post-Secondary Education"; based on conference "Accessing Opportunities to Post-Secondary Education" organized by MMAYC and APCFNC Secretariat, Moncton, NB, 22-24 January 2010

Gitpu Nevin

curricular inclusiveness

- **stated in Jan 2010, when on AFN National Youth Council; also, MMAYC**
- **Senior Undergraduate, St. Francis Xavier University**
- **Elsipogtog community, Mi'kmaw Nation**

I'm really interested in philosophy; I've taken a lot of philosophy courses. And the view of western philosophers is that they were the only philosophers ... you know, that they were the only intelligent thinkers in the world. And when they speak about the history of the world or the history of philosophical thought in the world, it always starts for them in the origins of their culture, always. When they speak of the world, it's always only in their context, you know. Where did democracy start? They would never ever mention a native American nation, or anybody in South America, or even in Asia. It's always where their democracy started. And they call it the world. When they talk about world religions, it's primarily western religions. It's ridiculous ... and, like [for me] no, that's not the world - that's your world - that's just your belief ... there's other people in the world. *(quoted with permission, March 2012)*



Artist Gerald Gloade; Millbrook First Nation

from: video "First Nations Youth Guiding Youth: Accessing & Surviving Post-Secondary Education"; based on conference "Accessing Opportunities to Post-Secondary Education" organized by MMAYC and APCFNC Secretariat, Moncton, NB, 22-24 January 2010

Dr. Marie Battiste

cognitive imperialism

- **Professor of Educational Foundations, University of Saskatchewan**
 - **Potlotek community, Mi'kmaw Nation**
- article: Indigenous Knowledge: Foundations for First Nations**
in: WIN-HEC Journal, 2005

After nearly a century of public schooling for tribal peoples in Canada, the most serious problem with the current system of education does not lie in its failure to liberate the human potential among Aboriginal peoples, but rather in its quest to limit thought to cognitive imperialistic policies and practices. This quest denies Aboriginal people access to and participation in the formulation of government policy, constrains the use and development of Aboriginal cultures in schools, and confines education to a narrow view of the world and its knowledge foundations that threaten the global future.

Cognitive imperialism is a form of cognitive manipulation used to disclaim other knowledge bases and values. Validated through one's knowledge base and empowered through public education, it has been the means by which whole groups of people have been denied existence and have had their wealth confiscated. Cognitive imperialism denies people their language and cultural integrity by maintaining the legitimacy of only one language, one culture, and one frame of reference.



complete article available at:
<http://www.win-hec.org/docs/pdfs/Journal/Marie%20Battiste%20copy.pdf>

Artist Gerald Gloade
Millbrook First Nation

Dr. David Newhouse

best knowledges
into dialogue

- Chair of Indigenous Studies, Trent University
- Onondage, Six Nations of Grand River, ON

article: Ganigonhi:oh: The Good Mind Meets the Academy
in: Canadian Journal of Native Education, 2008, Vol. 31: 184-197.



Artist Gerald Gloade; Millbrook First Nation

In my view, one of the fundamental purposes of a university is to help us to understand the world and ourselves and to transmit our knowledge to a new generation of people. It ought also to help us explore what a good life is. And in the 21st century, it ought to foster highly creative, innovative human beings adept at creating or, if you will, uncovering new truths. A university ought to bring the best of human knowledges into dialogue so that we might better understand the universe. (p. 189)



complete article available at:
<http://blogs.mtroyal.ca/fwiddowson/files/2010/04/The-good-mind-meets-the-academy-Newhouse.pdf>

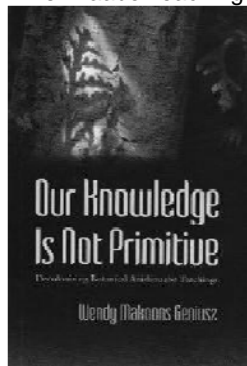
Dr. Wendy Makoons Geniusz

decolonization

- Director, American Indian Studies, University of Wisconsin
 - Anishinaabe
- book (2009):**

Our Knowledge
Is Not Primitive

Decolonizing Botanical
Anishinaabe Teachings



Our priorities in recording or reclaiming this information [TK] differ from those of non-native researchers, who often view their research on us as: a preservation effort, a final attempt to save strands of a dying culture, a bringing of native knowledge to the rest of the world, or a means of gathering data to prove some academic theory.

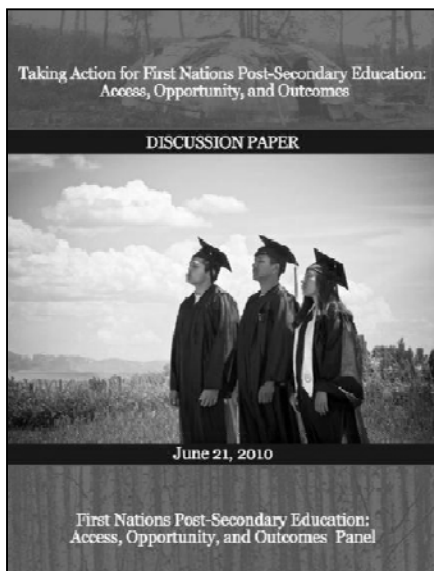
Instead, our priority is to revitalize this knowledge within our own lives so that it will be there for our children and grandchildren and their children and grandchildren.

(page 8)

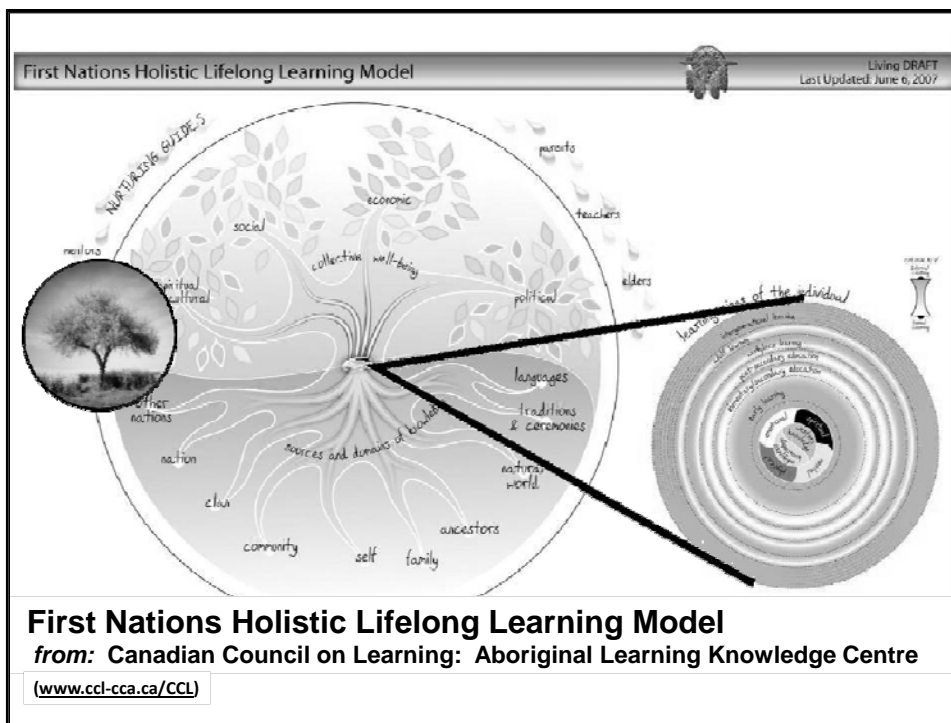
A FIRST NATIONS VISION

First Nations view education as a process of nurturing learners in linguistically and culturally-appropriate, holistic learning environments that meet individual and collective needs, thereby ensuring that all First Nations people achieve their personal and collective visions within lifelong comprehensive learning systems. (page 6)

complete document available at:
<http://www.afn.ca/uploads/files/pse-dp.pdf>



Assembly of First Nations



First Nations Holistic Lifelong Learning Model

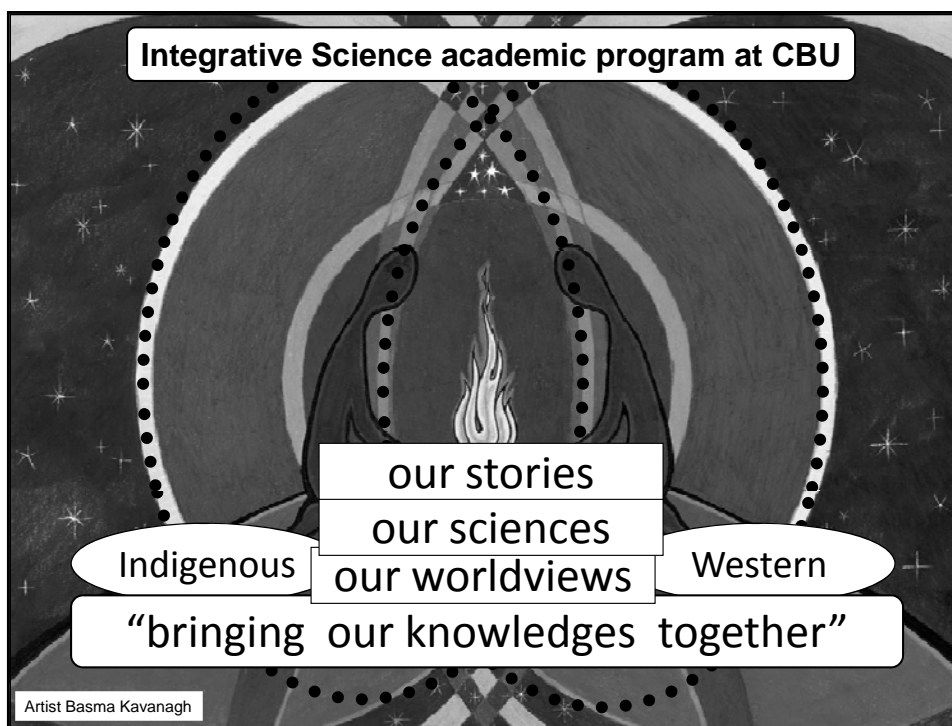
from: Canadian Council on Learning: Aboriginal Learning Knowledge Centre

www.ccl-cca.ca/CCL

First Nations Holistic Lifelong Learning Model Living DRAFT
Last Updated: June 6, 2007

First Nations Holistic Lifelong Learning Model
from: Canadian Council on Learning: Aboriginal Learning Knowledge Centre
www.ccl-cca.ca/CCL





Integrative Science academic program at CBU

from:
“In my opinion” by C. Bartlett: The gift of multiple perspectives in scholarship
(March 2012 issue of *University Affairs*)

Since the IS [Integrative Science] academic program was implemented at CBU in 1999 (and the focus of a cover story in *University Affairs* in December 2001), it has achieved a great deal, but it also has encountered many challenges.

Among its achievements, 27 Mi'kmaw students – all with some relationship to IS – have graduated with a science or science-related degree at CBU (fewer than five without IS affiliation have ever graduated); 13 are graduates from the four-year BSc community studies degree, IS concentration. Most now hold key positions (school principal, research scientist or assistant, job coach, natural resource management, nurse, teacher) in their communities. Some Mi'kmaw students who started with IS courses have graduated with a BA or BACS degree while others have left university, a few with intent to return. Mi'kmaw IS undergraduates have presented at academic conferences in Canada and internationally. Thirteen NSERC undergraduate summer research awards went to Mi'kmaw IS students. Up to 2007 and in total, about 100 Mi'kmaw students experienced first-year IS courses, many recruited by the Mi'kmaw Science Advantage Program run by CBU's then Mi'kmaw College Institute.

FULL TEXT AVAILABLE AT:
<http://www.universityaffairs.ca/the-gift-of-multiple-perspectives-in-scholarship.aspx>

photo credit: CBU

Integrative Science academic program at CBU

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from:

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Within academe, the shoals are poorly charted for such innovation. The IS academic program met diverse challenges from the outset – including inconsistencies and insufficiencies at the administrative, faculty, budgetary and recruitment levels – and has floundered in recent years. Since 2007, there has been no new enrolment into the program. Only first-year IS courses are being offered, and they have shifted to fundamentals of science within BA access programming (meritorious in its own right yet not the original IS vision).



Artist Gerald Gloade
Millbrook First Nation

FULL TEXT AVAILABLE AT:
<http://www.universityaffairs.ca/the-gift-of-multiple-perspectives-in-scholarship.aspx>

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I believe it essential to find better ways to enable collective stewardship and participation by indigenous peoples, including students from the aboriginal community, alongside consultation with Elders, wherever traditional aboriginal knowledge is congruent with formal recommendations made by Elders. This was the result of a consultation with the communities in Atlantic Canada and approved by the Atlantic Chiefs in September.

**WHAT COULD
HAVE HELPED
SUSTAIN
EARLY SUCCESS?**

FULL TEXT AVAILABLE AT:
<http://www.universityaffairs.ca/the-gift-of-multiple-perspectives-in-scholarship.aspx>

Challenges re Integrative Science academic program

(reflections on 15+ years)

- conceptual (science?)
- political (systemic racism?)
- jurisdictional (whose program?)
- structural (what kind of program?)
- financial (resources?)
- instructional (who can / should?)
- physical (where?)
- pedagogical (how?)
- recruitment (who and how?)
- audience (why and whose needs?)
- pragmatic (students' lives?)
- definitional (what is "success"?)
- pragmatic (graduates do what?)
- capacity development (how nurture & make sustainable?)

from: PRESENTATION AT 2009 AAEDIRP CONFERENCE
ON ABORIGINAL EDUCATION; AVAILABLE AT:
<http://www.integrativescience.ca/uploads/articles/2009March-Bartlett-Marshall-Integrative-Science-Two-Eyed-Seeing-education-Aboriginal-lifelong-learning.pdf>



**Let's consider more than one
perspective regarding "challenges".**

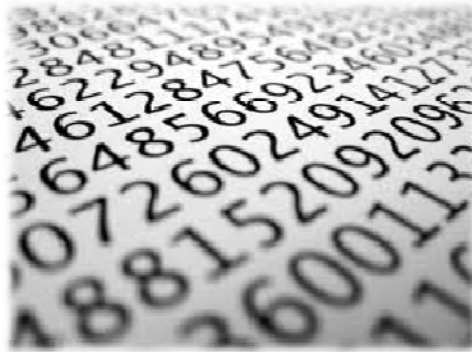


Artist Gerald Gloade
Millbrook First Nation



E.g., what is "SUCCESS"?

(general) perspective of an institution



It's about numbers of students enrolled and graduating.

E.g., what is "SUCCESS"?

perspective of an Elder



It's about realizing:
"Seeds germinate when ...
the environment
is appropriate."
(words of Elder Albert Marshall)



CBU 2009

from: PRESENTATION by C. BARTLETT and A. MARSHALL
at 2009 AAEDIRP CONFERENCE ON ABORIGINAL EDUCATION
<http://www.integrativescience.ca/uploads/articles/2009March-Bartlett-Marshall-Integrative-Science-Two-Eyed-Seeing-education-Aboriginal-lifelong-learning.pdf>

E.g., what is "SUCCESS"?

LET'S HAVE THE COURAGE

to try ... maybe falter ... but to learn and to keep trying



Spirit of the East

- Light
- Beginnings
- Renewal
- Hope
- Courage

What is the way forward?

LET'S HAVE THE COURAGE

to try ... maybe falter ... but to learn and to keep trying



words of **Elder Murdena:**

There is constant flux within balance: things come together ... then things fall apart ... and then come back together ... and fall apart again ... and come back together again. That's the way it is, always has been, and always will be.



CBU 2009

What is the way forward?

Integrative Science academic program at CBU

LESSONS LEARNED:
WHAT COULD
HAVE HELPED
SUSTAIN
EARLY SUCCESS?

from:

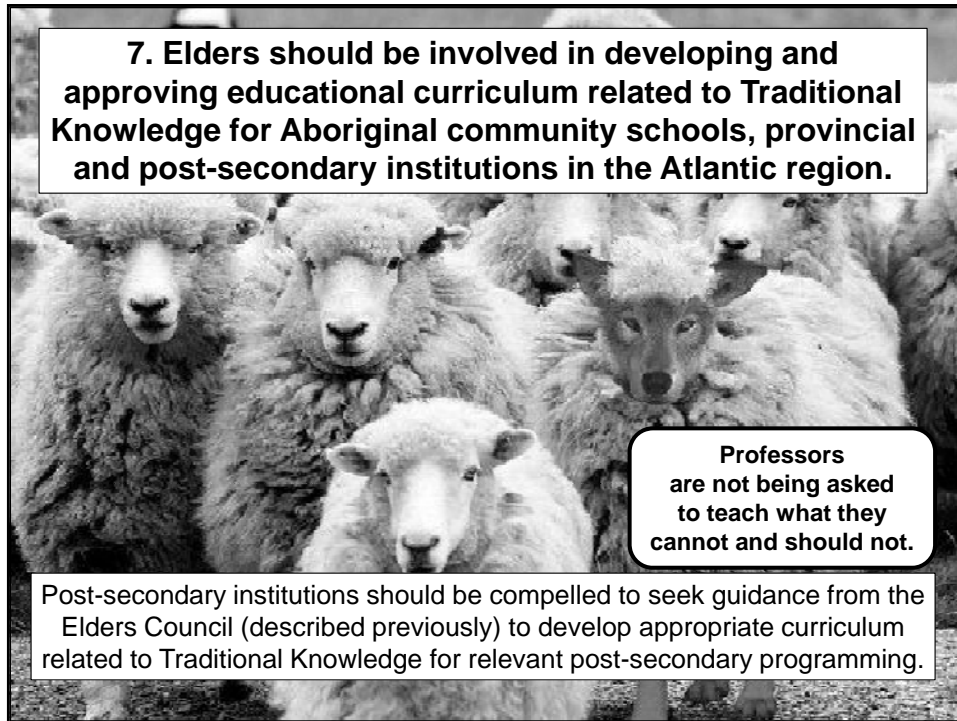
"In my opinion" by C. Bartlett: **The gift of multiple perspectives in scholarship**
(March 2012 issue of *University Affairs*)



I believe it essential to find better ways to enable collective stewardship and participation by interested Elders, educators and others from the aboriginal community, alongside constructive and critical institutional input. Consultation with Elders, wherever traditional aboriginal knowledge has a role, is congruent with formal recommendations made by Elders from Mi'kmaw, Wolastoqiyik, Innu, and Inuit communities in Atlantic Canada and approved by the Atlantic Chiefs in September.

What is the way forward?






7. Elders should be involved in developing and approving educational curriculum related to Traditional Knowledge for Aboriginal community schools, provincial and post-secondary institutions in the Atlantic region.

Professors are not being asked to teach what they cannot and should not.

Post-secondary institutions should be compelled to seek guidance from the Elders Council (described previously) to develop appropriate curriculum related to Traditional Knowledge for relevant post-secondary programming.



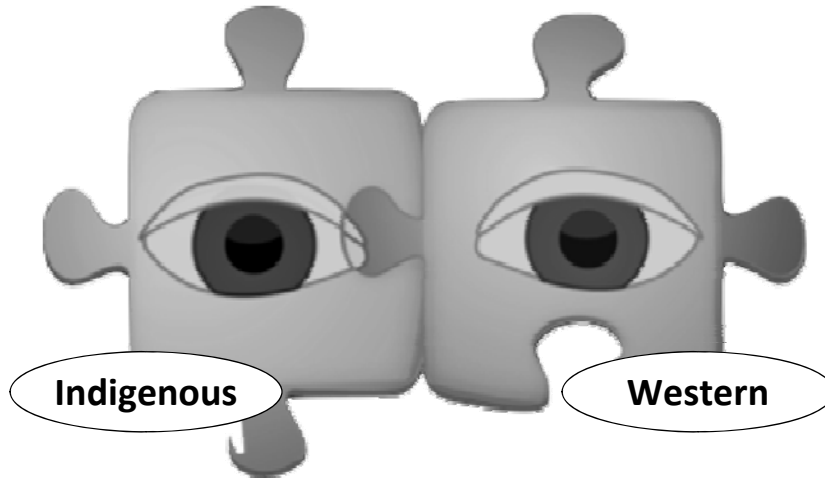
TWO-EYED SEEING
a Guiding Principle
for transcultural collaboration
(the Gift of Multiple Perspectives)

LEARN ... to see from one eye with the best in the Indigenous ways of knowing, and from the other eye with the best in the Western (or mainstream) ways of knowing

... and LEARN to use both these eyes together for the benefit of all.

(words of Mi'kmaw Elder Albert Marshall)


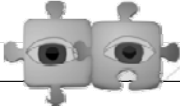
ETUAPT MUMK – TWO-EYED SEEING




examples, across Canada, of TWO-EYED SEEING



in Unama'ki - Cape Breton, Nova Scotia
"our home"





**in Integrative Science research
by university-based researchers and Mi'kmaw Elders**
(<http://www.integrativescience.ca>)




CANADA Land Cover
The map is based on satellite data obtained from the Advanced Very High Resolution Radiometer (AVHRR) on board the NOAA-16 satellite. The spatial resolution is about 1 kilometre. This means that one pixel on the map is equal to one square kilometre on the ground. Each land cover type can be identified by its unique spectral signature. Each signature is identified by a particular colour on the map.

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nationally,
by IAPH within CIHR

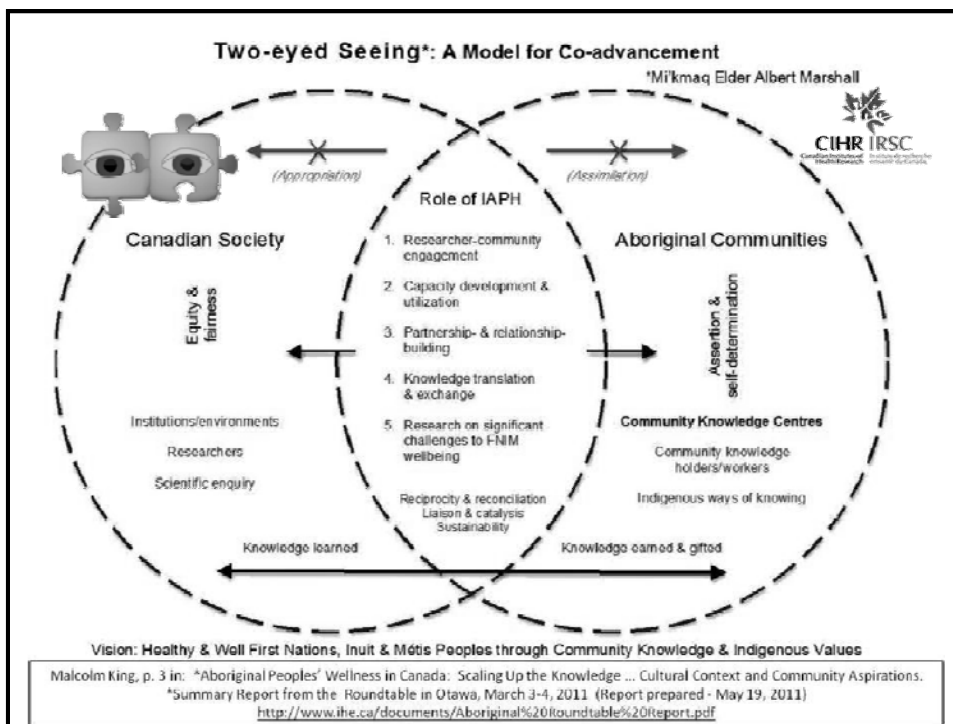


**in business case prepared in early 2011 by CIHR's
Institute of Aboriginal Peoples' Health for five years' programming**
(<http://www.ihe.ca/documents/Aboriginal%20Roundtable%20Report.pdf>)



CANADA Land Cover
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in Unama'ki - Cape Breton, Nova Scotia



**in collaborative environmental planning
for the Bras d'Or Lake ecosystem and watershed**
(<http://brasdorcepi.ca/>)

CANADA Land Cover

The map is based on satellite data obtained from the Advanced Very High Resolution Radiometer (AVHRR) on board the NOAA-16 satellite. The spatial resolution is about 1 kilometre. This means that one pixel on the map is equal to one square kilometre on the ground. Each land cover type can be identified by its unique spectral signature. Each signature is identified by a particular colour on the map.

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in British Columbia


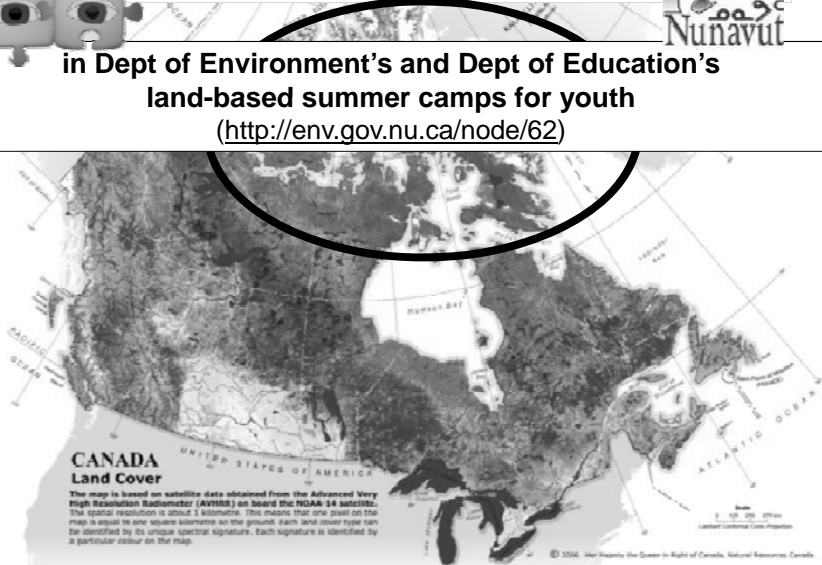
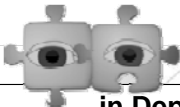


in First Nations coalition submission to the Cohen Commission on Sockeye Salmon in the Fraser River
<http://www.cohencommission.ca/en/pdf/FinalSubmissions/InitialSubmissions/16-InitialSubmission-FirstNationsCoalition.pdf>

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in Nunavut





in Dept of Environment's and Dept of Education's land-based summer camps for youth
<http://env.gov.nu.ca/node/62>


CANADA Land Cover
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in Ontario




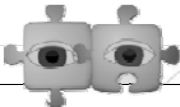
**in species-at-risk draft policy
for the American Eel (*Anguilla rostrata*)**
(http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@species/documents/document/stdprod_075572.pdf)




CANADA Land Cover
The map is based on satellite data obtained from the Advanced Very High Resolution Radiometer (AVHRR) on board the NOAA-16 satellite. The spatial resolution is about 1 kilometre. This means that one pixel on the map is equal to one square kilometre on the ground. Each land cover type can be identified by its unique spectral signature. Each signature is identified by a particular colour on the map.

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in Nova Scotia




**in interpretive exhibits planned for
Mi'kmawey Debert Cultural Centre**
• a visionary project of Confederacy of Mainland Mi'kmaq (CMM) •
(<http://mikmaweydebert.com/>)



CANADA Land Cover
The map is based on satellite data obtained from the Advanced Very High Resolution Radiometer (AVHRR) on board the NOAA-16 satellite. The spatial resolution is about 1 kilometre. This means that one pixel on the map is equal to one square kilometre on the ground. Each land cover type can be identified by its unique spectral signature. Each signature is identified by a particular colour on the map.

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in Nova Scotia




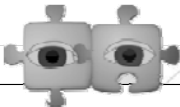
NOVA SCOTIA

**in the 10 year strategic plan
of the NS Government's Department of Natural Resources**
(http://www.gov.ns.ca/natr/strategy/pdf/Strategy_Strategy.pdf)

**CANADA
Land Cover**
The map is based on satellite data obtained from the Advanced Very High Resolution Radiometer (AVHRR) on board the NOAA-16 satellite. The spatial resolution is about 1 kilometre. This means that one pixel on the map is equal to one square kilometre on the ground. Each land cover type can be identified by its unique spectral signature. Each signature is identified by a particular colour on the map.

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in Nova Scotia



**DALHOUSIE
UNIVERSITY**

**in CIHR-funded research of
Dr. Heather Castleden with women of Pictou Landing First Nation**
(<http://www.globalnews.ca/health/grant+to+study+decades+of+effluent+on+fir+st+nation+empowering+womens+group/6442587489/story.html>)

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Land Cover**
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nationally,
by NCCAHA




in various events of
the National Collaborating Centre for Aboriginal Health
(<http://www.nccah-ccnsa.ca/en/>)




CANADA Land Cover
The map is based on satellite data obtained from the Advanced Very High Resolution Radiometer (AVHRR) on board the NOAA-18 satellite. The spatial resolution is about 1 kilometre. This means that one pixel on the map is equal to one kilometre on the ground. Each land cover type can be identified by its unique spectral signature. Each signature is identified by a particular colour on the map.

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APCFNC ELDERS PROJECT RECOMMENDATIONS


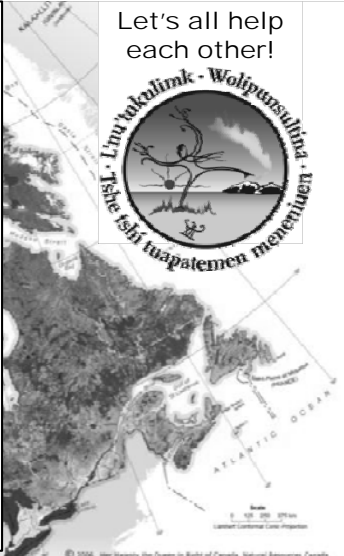


Let's do it too!

AAEDIRP
UNIVERSITY PARTNERS

- Dalhousie University*
- St. Thomas University*
- Acadia University*
- Saint Mary's University*
- Memorial University*
- Université de Moncton*
- Mount Allison University*
- Cape Breton University*
- University of PEI*
- St. Francis Xavier University*
- University of New Brunswick*
- Mount Saint Vincent University*

Let's all help each other!

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MI'KMAW TRADITIONAL KNOWLEDGE

some explanation within
TWO-EYED SEEING

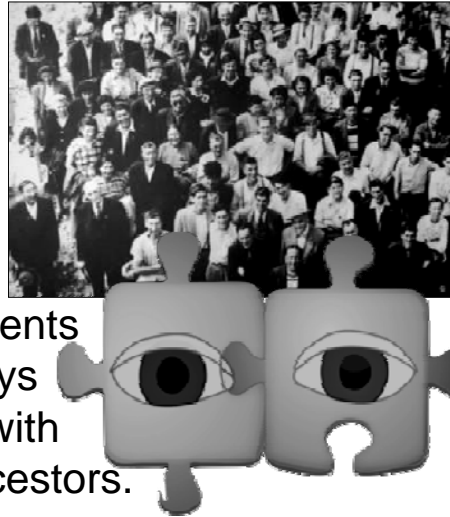


Artist Basma Kavanagh

AS ELDERS IN OUR TIME

We seek to be a conduit for wisdom of our Ancestors.

We seek to see with "TWO EYES" ... to take the accomplishments of the white man's ways further by blending it with the wisdom of our Ancestors.




AS ELDERS IN OUR TIME

We realize:

Knowledge is spirit.

It is a gift, passed on through many people.

We must pass it on.

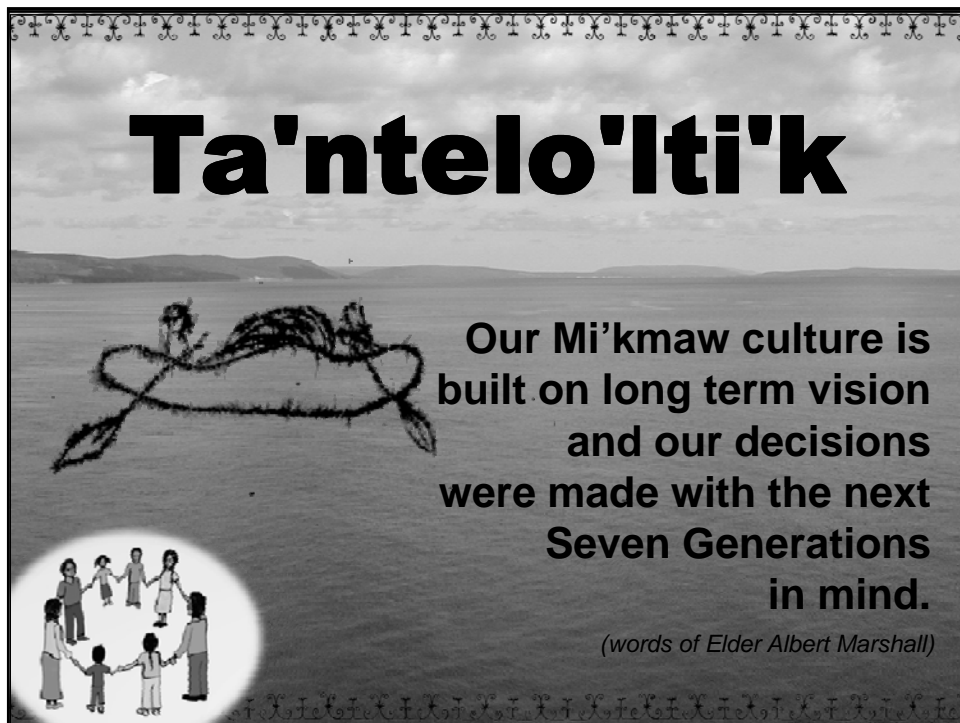
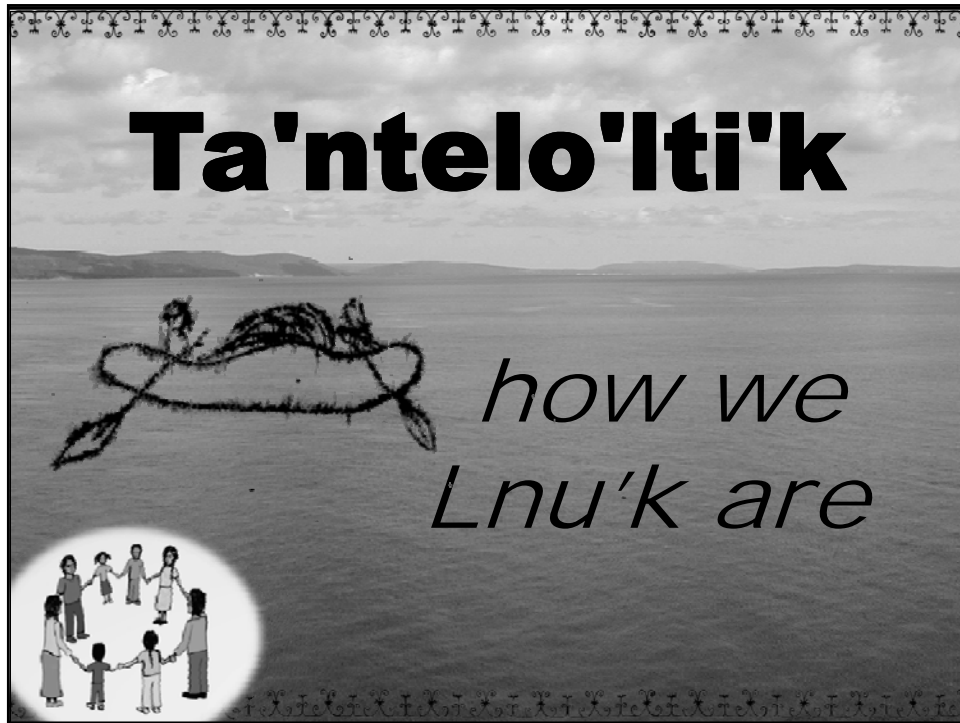


Ta'ntelo'lti'k



MI'KMA'KI

Native Council of Nova Scotia
Mi'kmaq Language Program
Artist: Michael J. Martin



Ta'ntelo'Iti'k

ONE GENERATION \approx 120 years

you or me

Great Grand Parent 20 yr
Grand Parent 20 yr
Parent 20 yr
Child 20 yr
Unborn 20 yr
Unborn of Unborn 20 yr
Unborn of Unborn of Unborn 20 yr

Ta'ntelo'Iti'k

7 X ONE GENERATION (\approx 120) \approx 840 years


you or me

Great Grand Parent 20 yr
Grand Parent 20 yr
Parent 20 yr
Child 20 yr
Unborn 20 yr
Unborn of Unborn 20 yr
Unborn of Unborn of Unborn 20 yr


**Seven Generations
 \approx 840 years**

Mi'kmaw Traditional Knowledge

So this is what we truly believe ...
this is what reinforces our spiritualities:



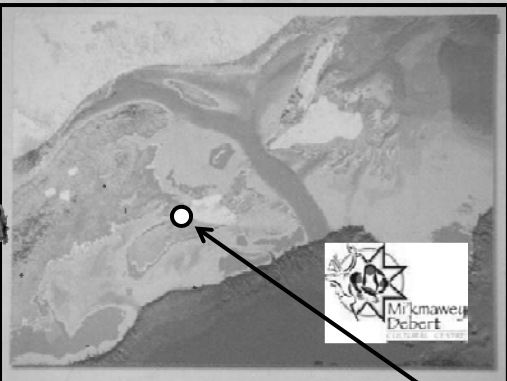

that no one being is greater than the next, that we are part and parcel of the whole, we are equal, and that each one of us has a responsibility to the balance of the system.



(words of Elder Albert Marshall)

Mi'kmaw Traditional Knowledge

Its "PRINCIPLE OF HUMILITY" is based on
Lnu'k knowledge ... evolving for 10,000 years.

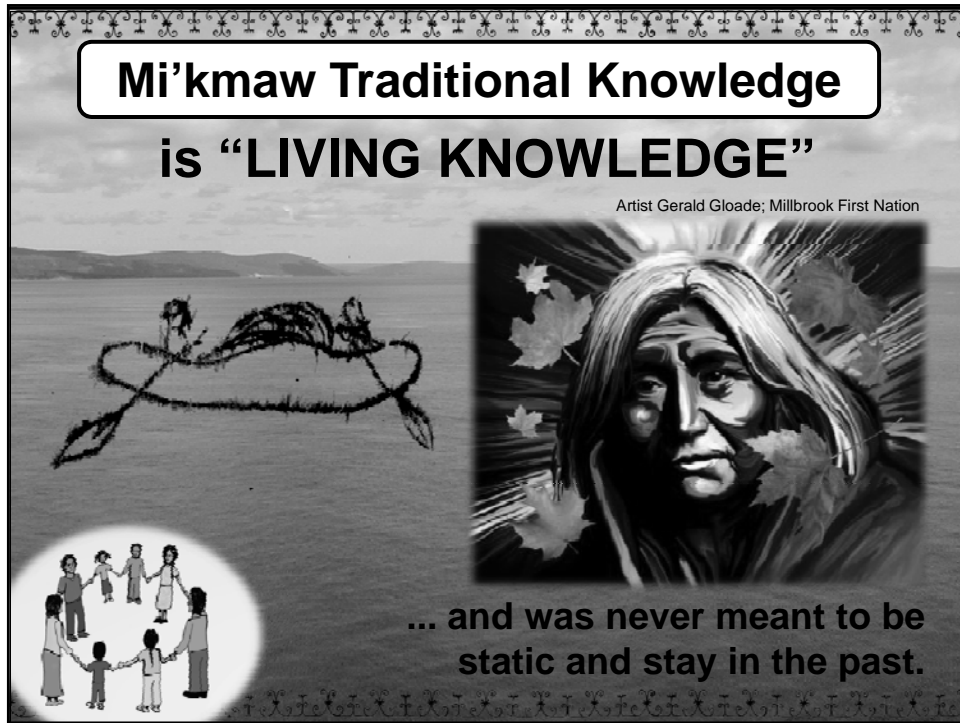


Extent of ice 11,000 years ago. People lived at the Debert site sometime between 11,000 and 10,000 years ago.

information source: signage on Mi'kmawey Debert Interpretive Trail

Mi'kmaw Traditional Knowledge
is "LIVING KNOWLEDGE"

Artist Gerald Gloade; Millbrook First Nation




... and was never meant to be static and stay in the past.

Mi'kmaw Traditional Knowledge
is "LIVING KNOWLEDGE"

within a worldview in which our

VALUES,
ACTIONS,
and
KNOWLEDGE



... are all towards:

INTERCONNECTIVENESS

Mi'kmaw Traditional Knowledge

Relationships pattern our lives.

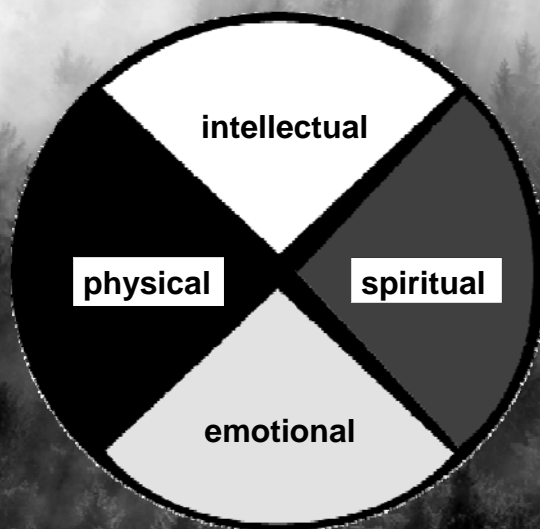
- example: family ... who is your mother?

Relationship patterns become the primary navigators for how we go through life.

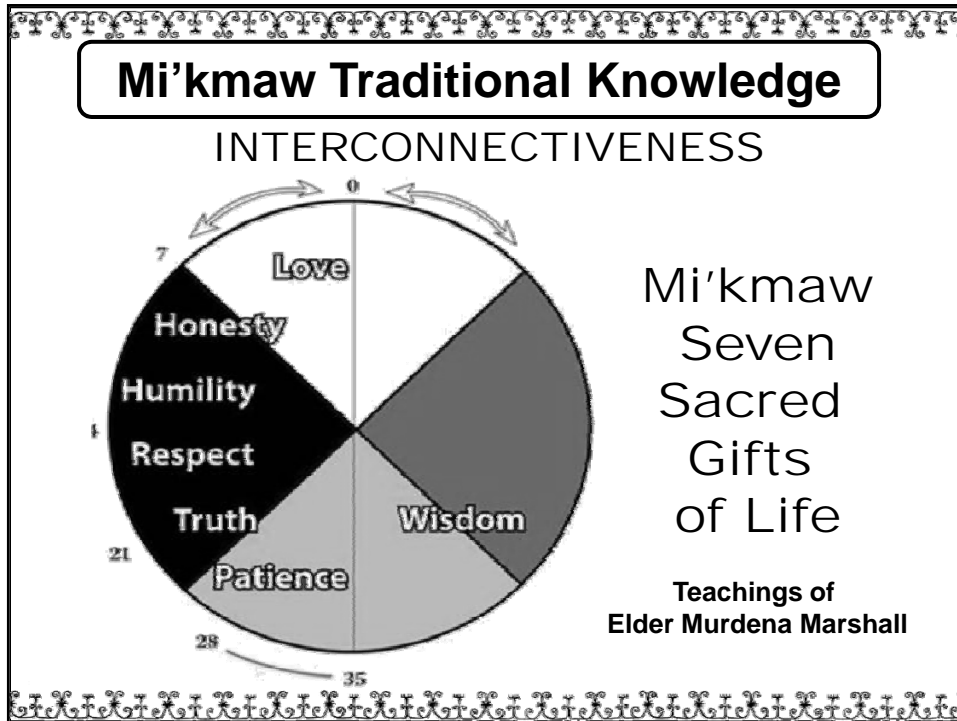
**MAKING OUR WAY:
PATTERNS of
INTERCONNECTIVENESS**

Artist Gerald Gloade
Millbrook First Nation

Mi'kmaw Traditional Knowledge



Four
Aspects
of Being
Human
thus also with
Traditional
Knowledge



(words of Elder Albert Marshall)

Our Mi'kmaw language is the key to how our actions will unfold. Each word is much deeper than only taking care of an object. Animacy brings personal connection ... such that actions fit actions (everything is in the picture) and we are always mindful of the ...

First Sacred Gift of Life: LOVE

EXAMPLES

- 1) pekajo'tmnej = consider all aspects
... *action is harmonious*
- 2) wulo'tmnej = love some one
... *action is care*
- 3) sespite'tmnej = worry about what you do
... *action is guided*

**Our language teaches us that everything
alive is both physical and spiritual.**

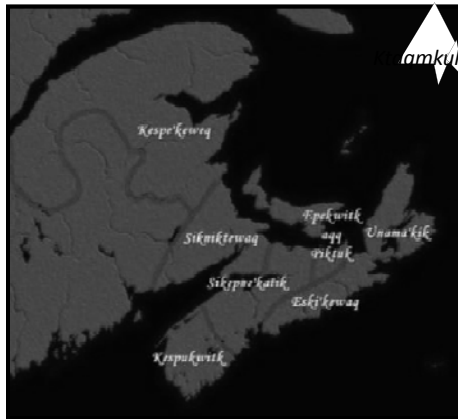
**The onus is on
the person to look at
our natural world
with two perspectives.**

**Modern science
sees objects,
but our language teaches
us to see subjects.**



Artist Gerald Gloade; Millbrook First Nation

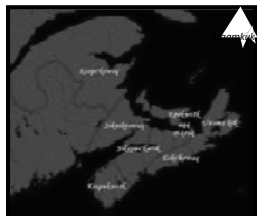
**MI'KMAW LAND
- MI'KMAW LANGUAGE -**



**Land of Fog
Lying in the Water and
Explosive Area
Skin Dresser's Area
Wild Potato Area
Land's End
Drainage Area
Last Land
Land Across the Water**

map (modified) from: www.muiniskw.org

MI'KMAW LAND - MI'KMAW LANGUAGE -



map (modified) from: www.muiniskw.org

Unama'kik
Epekwitk
Pitukewa'kik
Eski'kewa'kik
Sipkne'katik
Kespukwitk
Sikniktewa'qkik
Kespe'kewa'qkik
Ktaqmkuk

Land of Fog
Lying in the Water and
Explosive Area
Skin Dresser's Area
Wild Potato Area
Land's End
Drainage Area
Last Land
Land Across the Water

map (modified) from: www.muiniskw.org



Artist Gerald Gloade
Millbrook First Nation

**Everything that we do to our natural world ...
we also do to ourselves.**

Netukulimk *All Our Relations*
“sustaining ourselves”
yes ... but really is a much richer concept;
it is holistic.
(words of Elder Albert Marshall)



Netukulimk *All Our Relations*
“sustaining ourselves”
Co-existence
Inter-dependence
Community Spirit
(words of Elder Albert Marshall)

... takes you into a place where you are very conscious of how the human two-leggeds are interdependent and interconnective with the natural world ...
this philosophy / ideology is so ingrained in your subconscious that you are constantly aware of not creating an imbalance.



Netukulimk ... teaches you



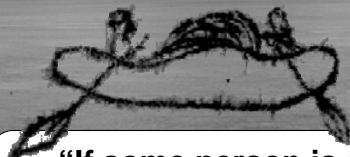
Co-existence

“When we look at Creator, if it was meant for me to know everything that I needed to get along, then I would only be one person in the world. Instead, each person is given a skill and develops those skills.”

words of Mi'kmaw Elder Albert Marshall

from: Master's thesis research “Mi'kmaw traditional knowledge of eels” by Sana Kavanagh

Netukulimk ... teaches you



Inter-dependence

“If some person is struggling, apply your skills to compensate for that person. Some days I'm down and out ... the community will not let me go hungry.”

words of Mi'kmaw Elder Albert Marshall

from: Master's thesis research “Mi'kmaw traditional knowledge of eels” by Sana Kavanagh

Netukulimk ... teaches you



Community Spirit

“The sense of community is constantly triggered ... [you’re] fine tuning your skills to live in balance and harmony with others. It’s a sense of community enmeshed in total being.”

words of Mi'kmaw Elder Albert Marshall

from: Master's thesis research “Mi'kmaw traditional knowledge of eels” by Sana Kavanagh

Netukulimk ... teaches you



Humans possess responsibilities.



Other species possess rights.

Netukulimk ... teaches you



Artist Gerald Gloade; Millbrook First Nation

Netukulimk

What is the objective when we speak of economic development?

Are there to be benefits to a select few, or will it be from a First Nation perspective?



We have to sustain ourselves at this particular time (era). But we need not just mirror or copy current economic models where entrepreneurs or others can maximize profit without concern for the collective or for the environment.

Artist Gerald Gloade; Millbrook First Nation



How are we to provide input?

words of Elder Albert Marshall from: **"Two-Eyed Seeing: 'taking down the boundaries' between Mi'kmaq Traditional Knowledge and the mainstream"** at AAEDIRP's *LET'S WORK TOGETHER: A CONFERENCE ON CREATING MEANINGFUL & SUSTAINABLE EMPLOYMENT FOR ATLANTIC ABORIGINAL PEOPLE*; 16-18 February 2010; Dartmouth, NS
<http://www.integrativescience.ca/uploads/articles/2010February-Bartlett-Marshall-Integrative-Science-Two-Eyed-Seeing-economic-development-Mi'kmaq-knowledge-barriers.pdf>

Netukulimk



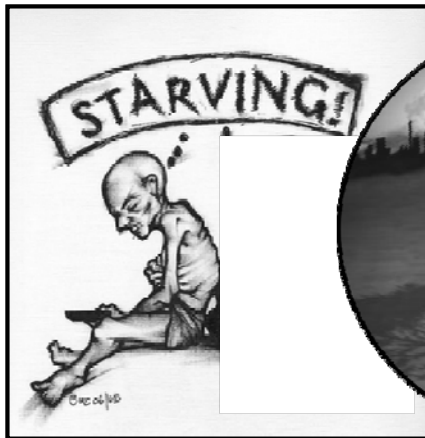
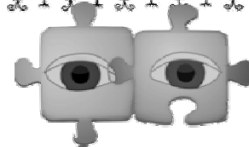
Artist Gerald Gloade; Millbrook First Nation

We understand economic development as somewhat foreign ... one objective has to be to provide opportunities for groups of people so they can sustain themselves adequately, plus the community. But, at the same time as we are using Gifts from Creator, we must:

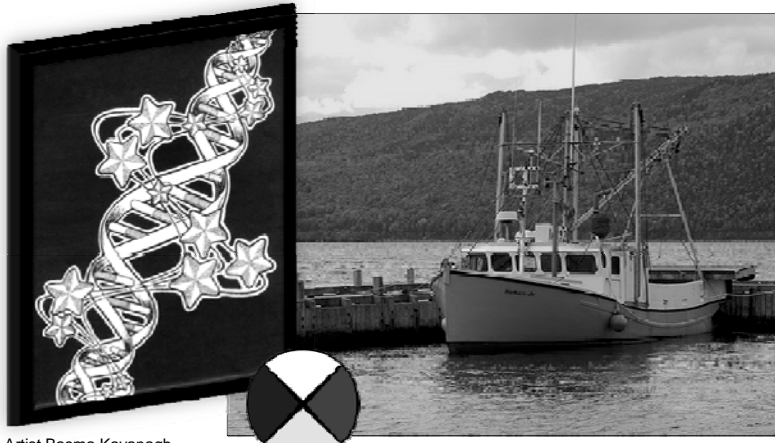
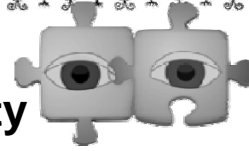
- 1) NOT compromise ecological integrity, and
- 2) ALWAYS look into the future so next generations have the same opportunities.

source: see previous slide

If people are starving,
they will not care about
environmental sustainability ...

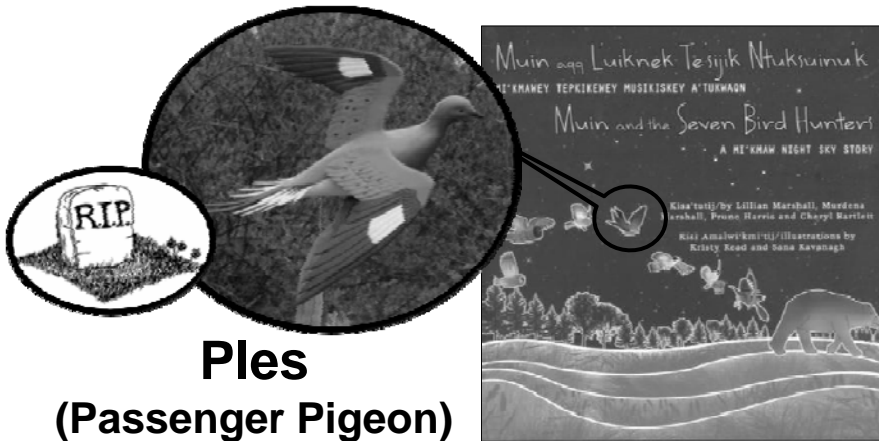


If pollution exceeds
the natural cleansing capacity
of our ecosystems ...



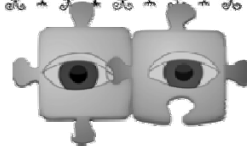
Artist Basma Kavanagh

If species become extinct,
some of our relations are
gone forever ...



Ples
(Passenger Pigeon)

**If species become extinct,
some of our relations are
gone forever ...**

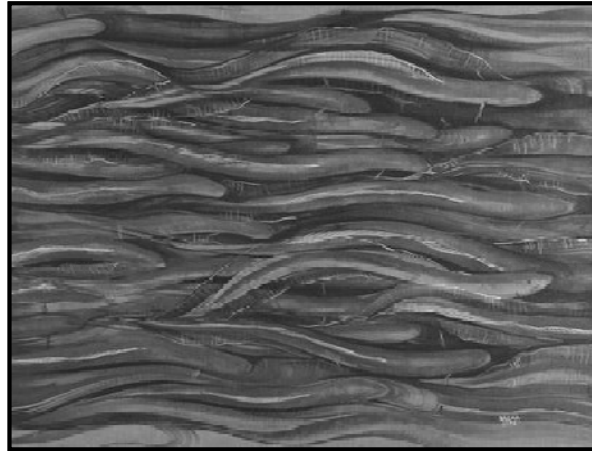


Artist Basma Kavanagh

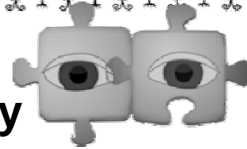


Artist Gerald Gloade
Millbrook First Nation

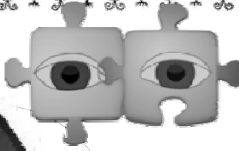
**Eels (Kataq)
are now a
*Species
of Concern.***



**If consumption of resources
exceeds the carrying capacity
of our ecosystems ...**



If we do not recognize that forests are watersheds and thus our life support ...



All these things that Creator has given us are sustenance in both the physical and spiritual senses.



Artist Gerald Gloade
Millbrook First Nation

Traditionally, nothing was taught as black and white.
Everything was story ... where you have the
responsibility to listen and reflect. This is a much
more profound way of learning because you have
the opportunity for relationship with the knowledge.

words of Elder Albert Marshall

I must bring relationships into my life.
If a sense of relationship with the knowledge is
not identified, then it becomes a duty and
you memorize to appease someone.
The understandings have not been assimilated;
the head and heart have not been connected.

Artist Gerald Gloade
Millbrook First Nation

**Our language teaches us that everything
alive is both physical and spiritual.**



the “HEALING TENSE”
in the Mi’kmaw language

*teachings of
Elder Murdena Marshall*

**WE HEAL
TOGETHER**





Canada Research Chairs / Chaires de recherche du Canada
 Social Sciences and Humanities Research Council of Canada / Conseil de recherches en sciences humaines du Canada

Canada 150
 Canada

CIHR IRSC
 Canadian Institutes of Health Research / Instituts de recherche en santé du Canada

**Dr. Ivar Mendez, Director
 Brain Repair Centre,
 Dalhousie University**

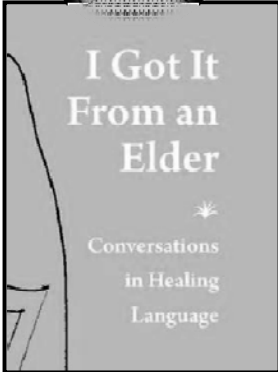
**Marilyn Iwama, PhD
 Poet and
 Research Associate in
 Integrative Science
 (now Adjunct Faculty, UNBC)**

Gaspereau Press, Kentville, NS, 2007
 Iwama, M., Marshall, M., Marshall, A.,
 Mendez, I., and Bartlett, C.

the **HEALING TENSE**
 ... example verb conjugation:

“to be drunk”

- ketkiya (present)
- ketkiyayop (simple past)
- ketkiyayas **nek** (healing)

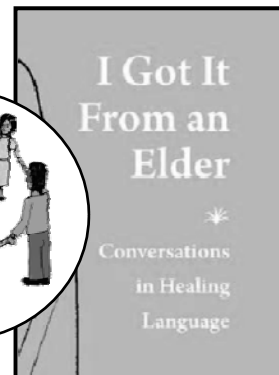
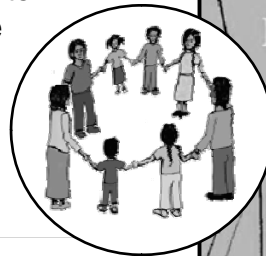


THE HEALING TENSE HEALS

[... he] has taken his misdeeds and placed them in front of him and walked around them, and said: "yes, I was there".

... when he goes into this healing tense, then my attitude has to change ... everybody in the household ... everybody ... has to abide with him

*Murdena Marshall,
in conversation with Ivar Mendez*



for additional information, see:

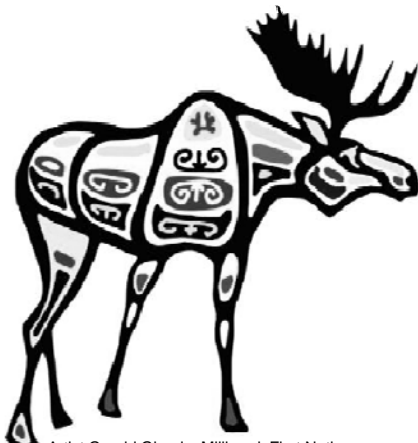
Iwama, M., Marshall, M., Marshall, A., and Bartlett, C. 2009. Two-Eyed Seeing and the Language of Healing in Community-Based Research. Canadian Journal of Native Education, 32: 3-23. <http://www.integrativescience.ca/uploads/articles/2009Iwama-et-al-CJNE-Two-Eyed-Seeing-Mikmaw-language-healing-community-based-research11.pdf>

We need to come together as one where all these things can be taken in.



Our overarching understanding has to be:

that our culture is still very much alive ... and we can extract those principles of how one can sustain oneself without compromising abilities for the future.



Artist Gerald Gloade; Millbrook First Nation

Consciousness of Knowing

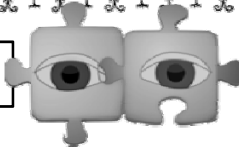


Artist Basma Kavanagh

***Co-existence
Interrelativeness
Interconnectiveness
Community Spirit
... with each other and
with Mother Earth***

All people must learn
Two-Eyed Seeing
so that knowledge of the
physical is not separated
from wisdom of the spiritual.

Is this all just philosophy?

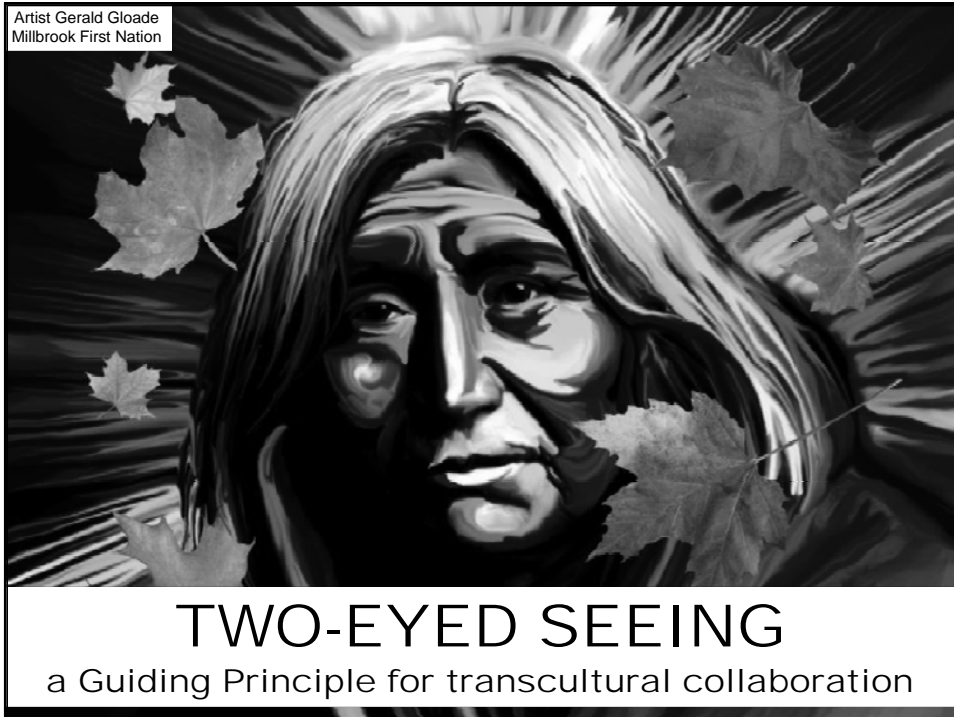


TWO-EYED SEEING

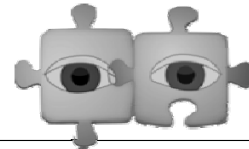
**is not going to be salvation, but rather
through these things termed “philosophy” ...**



**... if only we would
spend a few
moments to
determine if there
are possibilities for
change ... to hear the
stories from cultures
other than our own.**



TWO-EYED SEEING
is more than "just philosophy"!



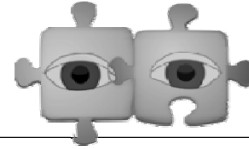
it can be viewed as a guiding principle for
TRANSDISCIPLINARY RESEARCH

TD research = a collaboration of representatives of different thought styles*

The term "transdisciplinary" has evolved from its more literal meaning of transcending the traditional boundaries of university-based research to include the participation of extra-academic stakeholders. While transcending discipline boundaries certainly remains an important activity of TD researchers, [others] have made reference to a range of related boundaries beyond discipline-based knowledge divides that TD researchers transcend. These include: affect/effect or fact/value; epistemological divides; and various systems conceptualization and boundary judgements. (p. 1147, in Carew, A.L. and Wickson, F. 2010. *The TD Wheel: a heuristic to shape, support, and evaluate transdisciplinary research. Futures 42: 1146-1155*)

***from: Pohl, C. 2011. What is progress in transdisciplinary research?
Futures 43: 618-626.
(p. 621)**

TWO-EYED SEEING
is more than "just philosophy"!



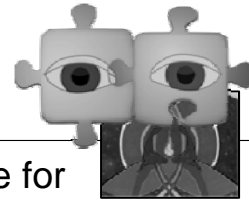
it can be viewed as a guiding principle for
TRANSDISCIPLINARY RESEARCH

***Table: Three concepts of transdisciplinarity as combinations of four features**

Transdisciplinarity according to concept	A	B	C
Features of transdisciplinarity			
Relating to socially relevant issues			
Transcending and integrating disciplinary paradigms			
Participatory research			
Searching for a unity of knowledge			


**from: Pohl, C. 2011. What is progress in transdisciplinary research?
Futures 43: 618-626.
(p. 620)*

TWO-EYED SEEING
is more than "just philosophy"!



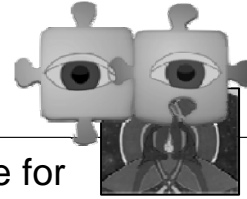
we chose it as a guiding principle for
INTEGRATIVE SCIENCE RESEARCH

***Table: Three concepts of transdisciplinarity as combinations of four features**

Transdisciplinarity according to concept	A	B	C
Features of transdisciplinarity			
Relating to socially relevant issues			
Transcending and integrating disciplinary paradigms			
Participatory research			
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**from: Pohl, C. 2011. What is progress in transdisciplinary research?
Futures 43: 618-626.
(p. 620)*

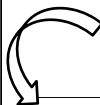
TWO-EYED SEEING
is more than "just philosophy"!



we chose it as a guiding principle for
CO-LEARNING

*** Four purposes for transdisciplinary research**

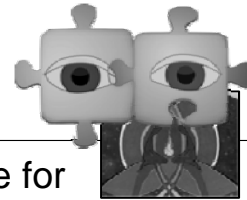
1. Grasp complexity of the socially relevant issue.
2. Take diverse perspectives on the issue into account.
3. Link abstract and case-specific knowledge.
4. Develop descriptive, normative, and practical knowledge that promotes what is perceived to be the common good.



The 4th purpose means that one of the specific challenges for TD researchers is to ensure that value systems do not operate in the shadows and instead are clarified by jointly developing the meaning of [specific topics or concepts] for the research project's context.

**from: Pohl, C. 2011. What is progress in transdisciplinary research?
Futures 43: 618-626.
(p. 620)*

TWO-EYED SEEING
is more than "just philosophy"!



we chose it as a guiding principle for
CO-LEARNING
a means to work meaningfully together

Artist Basma Kavanagh



In Unama'ki – Cape Breton,
a form of Co-Learning* has been
pioneered in various research projects
by Mi'kmaw Elders and educators and
the Integrative Science research team
at Cape Breton University.
Our approach continues to evolve.

* [http://www.integrativescience.ca/uploads/articles/2012-Bartlett-Marshall-Iwama-Integrative-Science-Two-Eyed-Seeing-enriching-discussion-framework\(authors-draft\).pdf](http://www.integrativescience.ca/uploads/articles/2012-Bartlett-Marshall-Iwama-Integrative-Science-Two-Eyed-Seeing-enriching-discussion-framework(authors-draft).pdf)

CO-LEARNING



In contemporary Canada, the words “healing” and “reconciliation” frequently travel together in discussions configured by Aboriginal perspectives and contexts. Elder Murdena offers a key insight with respect to healing; Willie Ermine offers a key insight with respect to reconciliation. Integrative Science has adopted and adapted both.

from: Bartlett, C., Marshall, M., Marshall, A., and Iwama, M.

Integrative Science and Two-Eyed Seeing: Enriching the Discussion Framework for Healthy Communities
 Chapter 3 in forthcoming book: “Beyond Intractability: convergence and opportunity at the interface of environmental, health and social issues”; edited by: Lars K. Hallstrom, Nicholas Guehlstorf, and Margot Parkes. UBC Press.

[http://www.integrativescience.ca/uploads/articles/2012-Bartlett-Marshall-Iwama-Integrative-Science-Two-Eyed-Seeing-enriching-discussion-framework\(authors-draft\).pdf](http://www.integrativescience.ca/uploads/articles/2012-Bartlett-Marshall-Iwama-Integrative-Science-Two-Eyed-Seeing-enriching-discussion-framework(authors-draft).pdf)



Murdena Marshall

CO-LEARNING



an insight re
 “healing”

For Murdena’s insight, we realize that participants in the co-learning journey need to be able to place the actions, values, and knowledge of their own culture out in front of themselves like an object, to take ownership over them, and to be able to say “that’s me”. Furthermore, as guided by Two-Eyed Seeing, we need these “objects” for both the Indigenous and Western worldviews. In this way, participants can learn both “that’s me” and “that’s you” to foster working together. Thus, we have developed simple responses (in text and visual form) to four “big picture” philosophical questions. These depictions enable us to put these philosophical considerations for our knowledge systems out in front of ourselves like an object (tool).

from: Bartlett, C., Marshall, M., Marshall, A., and Iwama, M.

Integrative Science and Two-Eyed Seeing: Enriching the Discussion Framework for Healthy Communities
 Chapter 3 in forthcoming book: “Beyond Intractability: convergence and opportunity at the interface of environmental, health and social issues”; edited by: Lars K. Hallstrom, Nicholas Guehlstorf, and Margot Parkes. UBC Press.

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CO-LEARNING

an insight re
"reconciliation"



Willie Ermine

In the Spirit of the East, we believe such [objects / tools] can help encourage "our place of beginnings" towards the thought frameworks that Ermine's (2007) insight indicates are required to reconcile the solitudes of Indigenous and Western cultures. That is, we suggest herein that the first phase of entering ethical space for the purpose of reconciling our scientific knowledges and ways of knowing – the ethical space conceived within Ermine's insight – includes learning to appropriately, correctly, and respectfully acknowledge the "that's me" and the "that's you" of our worldviews, as they configure our sciences.

from: Bartlett, C., Marshall, M., Marshall, A., and Iwama, M.

Integrative Science and Two-Eyed Seeing: Enriching the Discussion Framework for Healthy Communities
Chapter 3 in forthcoming book: "Beyond Intractability: convergence and opportunity at the interface of environmental, health and social issues"; edited by: Lars K. Hallstrom, Nicholas Guehlstorf, and Margot Parkes. UBC Press.

[http://www.integrativescience.ca/uploads/articles/2012-Bartlett-Marshall-Iwama-Integrative-Science-Two-Eyed-Seeing-enriching-discussion-framework\(authors-draft\).pdf](http://www.integrativescience.ca/uploads/articles/2012-Bartlett-Marshall-Iwama-Integrative-Science-Two-Eyed-Seeing-enriching-discussion-framework(authors-draft).pdf)

CO-LEARNING for Two-Eyed Seeing four "big picture" questions

1. Our World: This relates to *ontologies*, as we share a desire for our knowledge to have an overarching understanding of "how our world is". Question: **What do we believe the natural world to be?**

2. Our Key Concepts and Actions: This relates to *epistemologies*, as we share a desire for our knowledge to observe key values. Question: **What do we value as "ways of coming to know" the natural world, i.e. what are our key concepts and actions?**


3. Our Languages and Methodologies: We can focus on *tools we use to structure* our knowledge. Question: **What can remind us of the complexity within our ways of knowing?**

4. Our Overall Knowledge Goals: We can focus on *objectives*. Question: **What overall goals do we have for our ways of knowing?**

more explanation available in

[http://www.integrativescience.ca/uploads/articles/2012-Bartlett-Marshall-Iwama-Integrative-Science-Two-Eyed-Seeing-enriching-discussion-framework\(authors-draft\).pdf](http://www.integrativescience.ca/uploads/articles/2012-Bartlett-Marshall-Iwama-Integrative-Science-Two-Eyed-Seeing-enriching-discussion-framework(authors-draft).pdf)


CO-LEARNING for **Two-Eyed Seeing**
learning our strengths and learning together



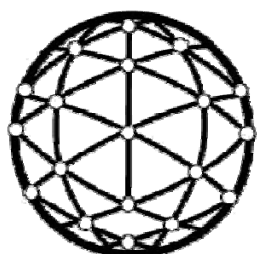
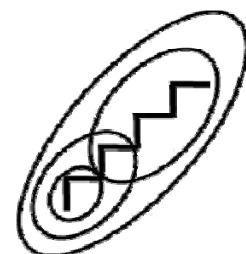
NATURAL WORLD: ontologies

interconnective	parts & wholes
beings ... interconnective and animate: spirit + energy + matter	objects ... comprised of parts and wholes characterized by systems and emergences: energy + matter
with CONSTANT CHANGE within balance and wholeness	with EVOLUTION

CO-LEARNING for **Two-Eyed Seeing**
learning our strengths and learning together

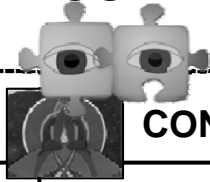


NATURAL WORLD: ontologies

interconnective	parts & wholes
	

CO-LEARNING for Two-Eyed Seeing

learning our strengths and learning together



CONCEPTS and ACTIONS: epistemologies

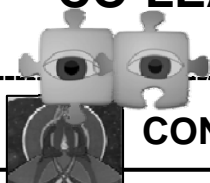
- respect
- relationship
- reverence
- reciprocity
- ritual (ceremony)
- repetition
- responsibility

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

J. Archibald, 2001, Can. J. Native Ed. 25(1):1-5

CO-LEARNING for Two-Eyed Seeing

learning our strengths and learning together



CONCEPTS and ACTIONS: epistemologies

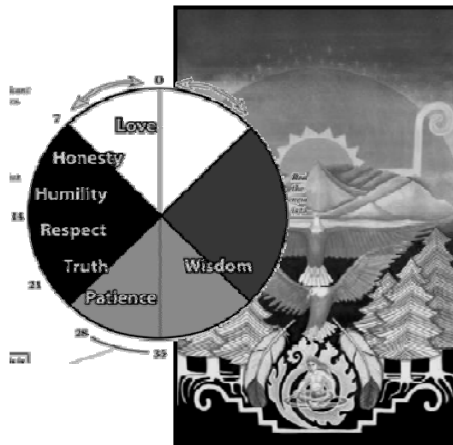




photo credit: NRC

Artist Basma Kavanagh

CO-LEARNING for **Two-Eyed Seeing**
 learning our strengths and learning together




LANGUAGES and METHODOLOGIES




weaving of patterns within nature's patterns via creative relationships and reciprocities among **love, land, and life (vigour)** that are constantly reinforced and nourished by **Aboriginal languages**

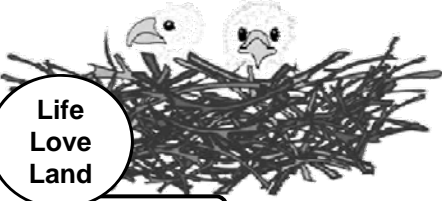
un-weaving of nature's patterns (especially via analytic logic and the use of instruments) to cognitively reconstruct them, especially using **mathematical language (rigour)** and computer models

CO-LEARNING for **Two-Eyed Seeing**
 learning our strengths and learning together



LANGUAGES and METHODOLOGIES






Life
Love
Land

vigour

WEAVING

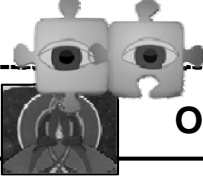


Math
&
instruments

rigour

UN-WEAVING

CO-LEARNING for Two-Eyed Seeing
learning our strengths and learning together



OVERALL KNOWLEDGE OBJECTIVES

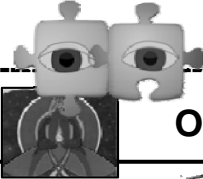
collective, living knowledge to enable nourishment of one's journey within expanding sense of "place, emergence and participation" for collective consciousness and interconnectiveness

towards resonance of understanding within environment

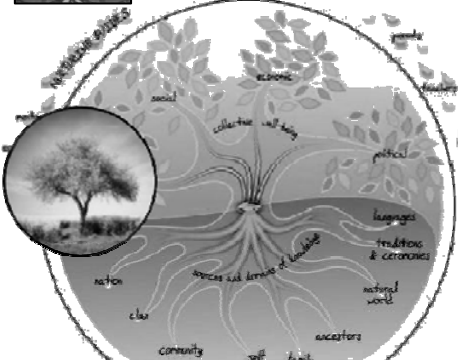
dynamic, testable, published knowledge independent of personal experience that can enable prediction and control (and "progress")

towards construction of understanding of environment

CO-LEARNING for Two-Eyed Seeing
learning our strengths and learning together

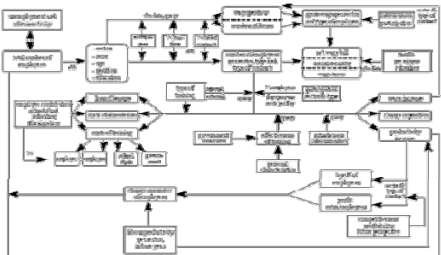


OVERALL KNOWLEDGE OBJECTIVES



from: CCL Aboriginal Learning Knowledge Centre (www.ccl-cca.ca/CCL)

towards resonance of understanding within environment



from: www.leads.ac.uk

towards construction of understanding of environment

APCFNC ELDERS PROJECT RECOMMENDATIONS



AAEDIRP
UNIVERSITY PARTNERS

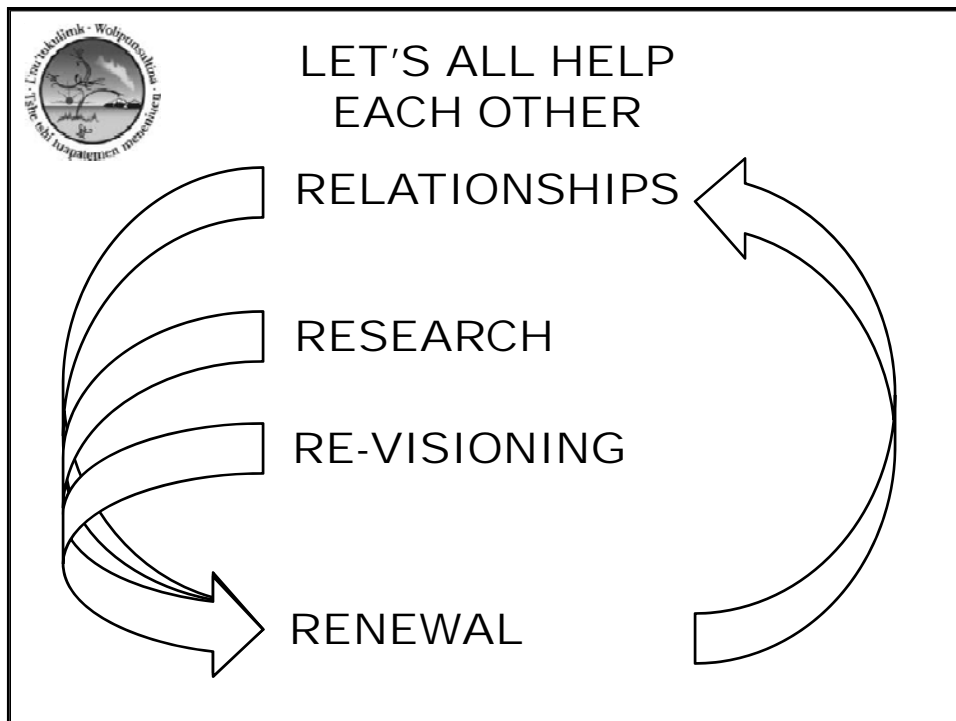
- Dalhousie University*
- St. Thomas University*
- Acadia University*
- Saint Mary's University*
- Memorial University*
- Université de Moncton*
- Mount Allison University*
- Cape Breton University*
- University of PEI*
- St. Francis Xavier University*
- University of New Brunswick*
- Mount Saint Vincent University*

Let's all help each other!



This map is based on satellite data obtained from the Advanced Very High Resolution Radiometer (AVHRR) on board the NOAA-16 satellite. The spatial resolution is about 3 kilometers. This means that one pixel on the map is equal to one square kilometre on the ground. Each land cover type can be identified by its unique spectral signature. Each signature is identified by a particular colour on the map.

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As we begin to work together, we must give thought to mechanisms to ensure:

Authenticity of TK. We need to recognize the great temptation for some people to “just make it up”. Validation, by recognized community Elders and Knowledge Holders, of that which is brought forward is exceedingly important.

Appropriate sources for TK. We need to acknowledge that Elders and Knowledge Holders ... each one of us ... has certain expertise, yes, but none of us knows everything. This is also why TK is collective knowledge.



*key thoughts from
Elder Albert Marshall*

Nourishment of the living relationships within TK. We need to recognize that stories, songs, crafts, practices, family, community, language, ceremonies, and connectivity with the land are important in the transmission of TK. It is living knowledge, not a book-based process of learning.

The lifelong learning journey for TK. We need to instill in all learners the understanding that TK is acquired over the whole of a person’s life journey; it is not a 3-4 year process akin to a university degree.

**Elders
Wisdom
Thinking
Understanding
Analyzing
Integration**

**Light
Beginnings
Renewal
Hope
Courage**

**Darkness
The unknown
Perseverance
Reflection
Respect for
others’ beliefs**

**Generosity
Determination
Goal setting
Ability to set aside
strong feelings in
order to serve others**

Artist Gerald Gloade; Millbrook First Nation

text from: The Sacred Tree, 1984, Bopp et al.





QUESTIONS

Wela'lioq

Thank you

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Artist Gerald Gloade; Millbrook First Nation

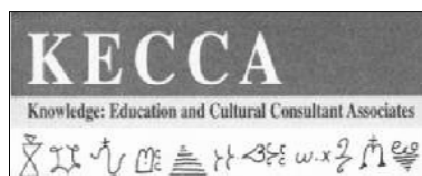
for additional information:

KECCA ... **Knowledge: Education and Cultural Consultant Associates**

KECCA is a Mi'kmaw First Nation's community-based entity that provides consulting services with respect to Mi'kmaw Traditional Knowledge.

Services provided are directed towards:

- ensuring accurate interpretation of Mi'kmaw Traditional Knowledge.
- ensuring correct orthography for written Mi'kmaq.
- ensuring protocols for ethical guidance and review via Unama'ki Council of Elders.
- ensuring timely and appropriate consideration for issues related to intellectual property rights.



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