

# Presentation by: Sana Kavanagh



### **Research Associate**

(with Dr. Cheryl Bartlett, CRC in Integrative Science) Institute for Integrative Science & Health Cape Breton University, Sydney, NS

### and Graduate Student

School for Resource and Environmental Studies, Dalhousie University, Halifax, NS

Presentation for Research Project Team (PA = Dr. Barbara Paterson) "Talking With Their Feet"

Causes and Impact of and Solutions to Non-Attendance Among Aboriginal People in Diabetes Clinics • VISUAL METHODS WORKSHOP • University of New Brunswick – Fredericton Campus 9:00 am -12:00 noon, 22 January 2009

#### Abstract

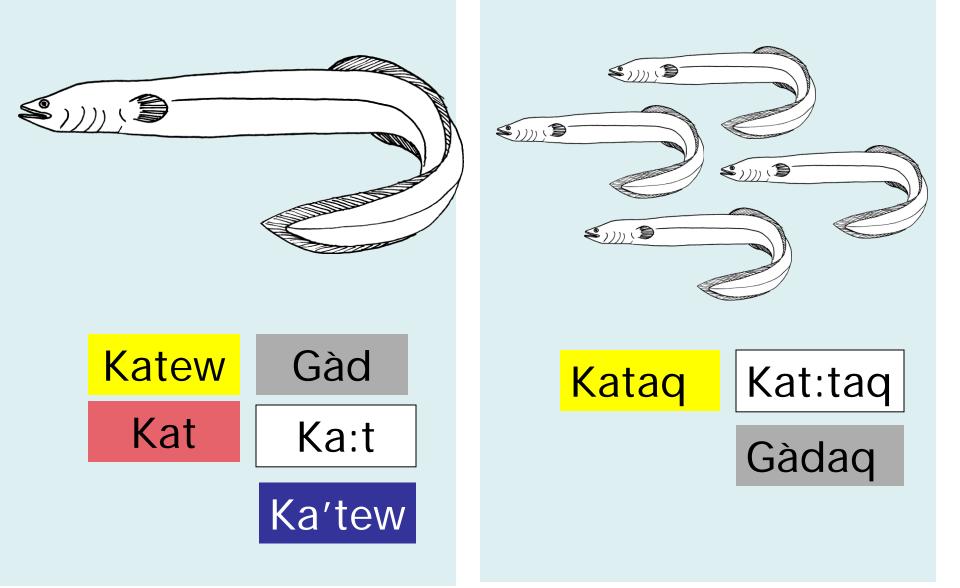
This is a highly visual PowerPoint presentation on using visuals (including photos, diagrams, and drawings) to stimulate discussion in interviews. The first part of the presentation looks at the theory (including advantages and disadvantages) of using visuals in interviews. The second part looks at my own research, where I used drawings and diagrams in interviews to stimulate discussion. I noticed participants offered some information in response to visuals which they did not offer in response to open-ended questions. Also, I will discuss how to create visuals for interviews from background research in one's topic, and the advantages and limitations of using visuals to represent concepts.

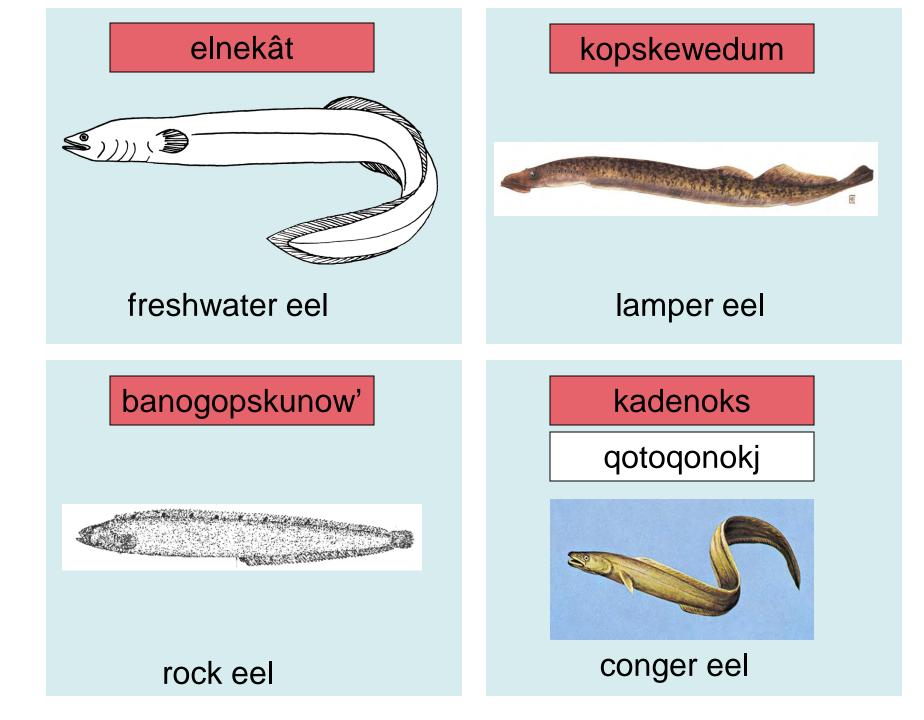
- 1.Organize secondary research
- 2. Share research plans (with Elders)
- 3.Briefly describe research (One-Pager)
- 4. Improve informed consent process
- 5. Provide visual interview guide
- 6.Prompt with visual (elicitation)
- 7.Record technical or spatial information
- 8.Communicate results

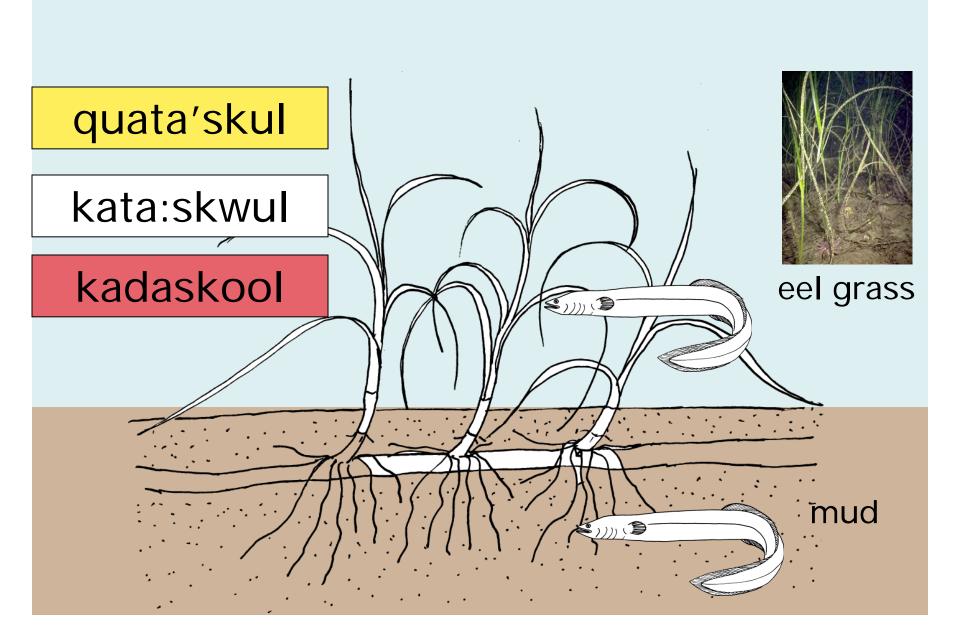
## **1.Organize secondary research**

2.Share research plans (with Elders) 3.Briefly describe research (One-Pager) 4. Improve informed consent process 5. Provide visual interview guide 6. Prompt with visual (elicitation) 7.Record technical or spatial information 8.Communicate results

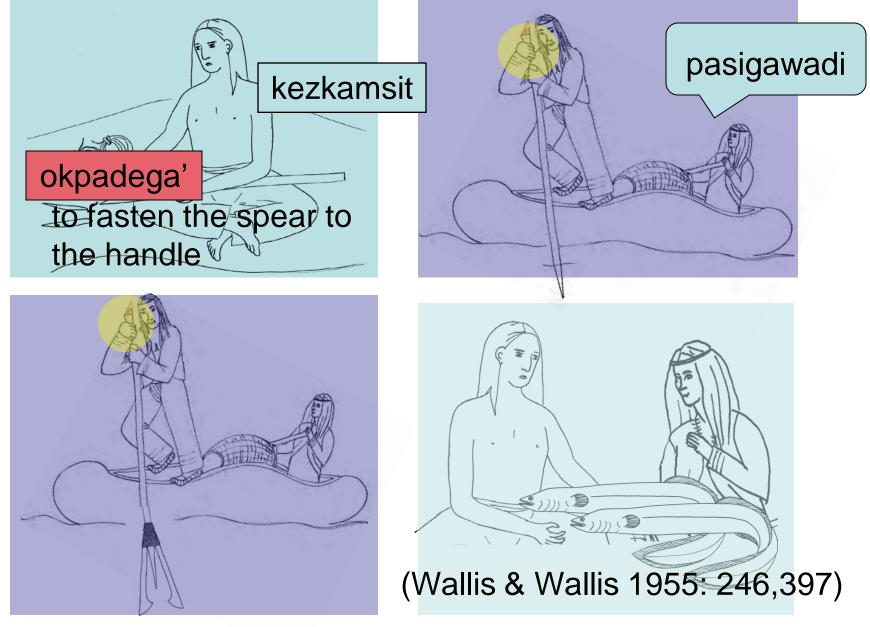
# **American Eel**







# story Origin of the Eel Spear



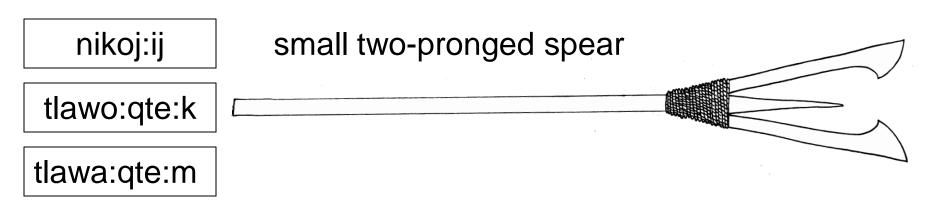
#### summer

### algoome

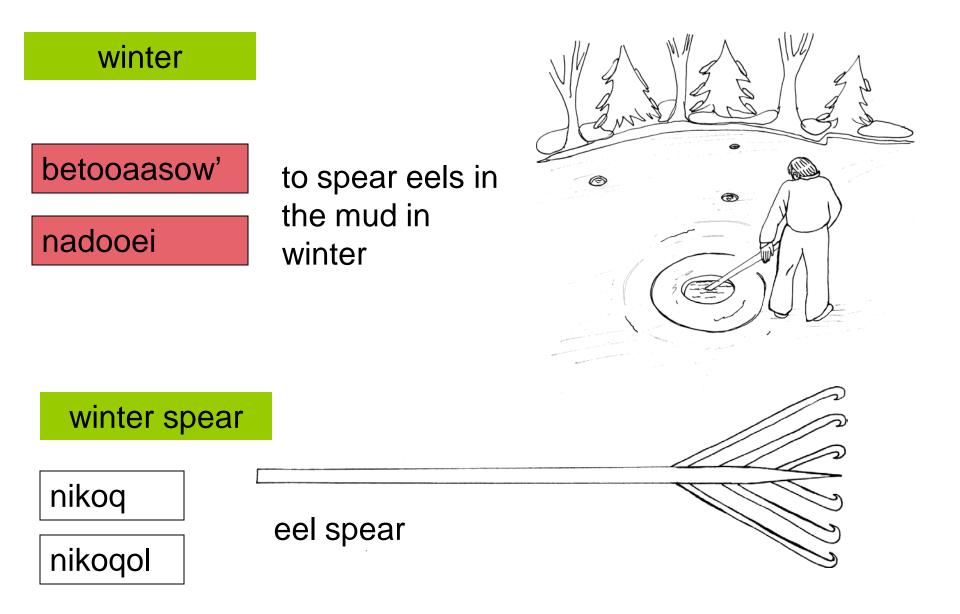
"hunting for something in the water"

to stand on the gunwales of a canoe and spear fish

#### summer spear

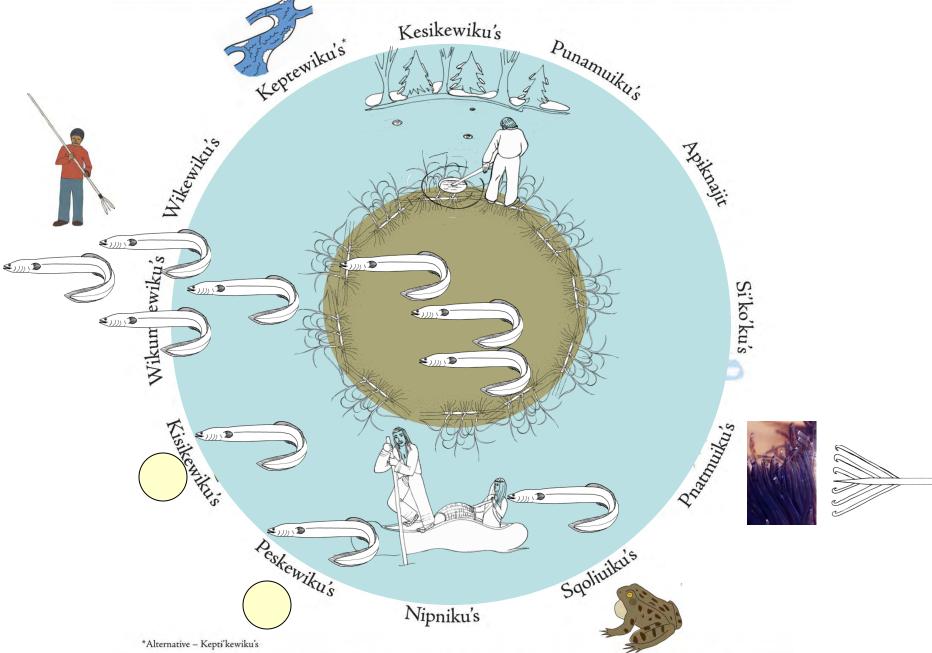


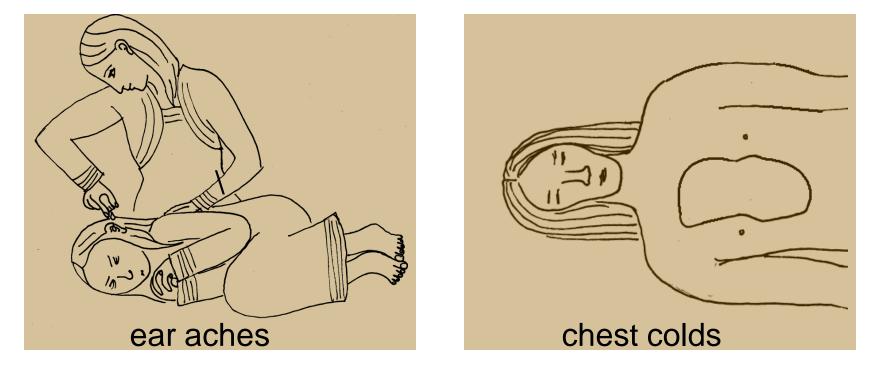




(Prosper)

# Mi'kmawe'k Tepknusetk

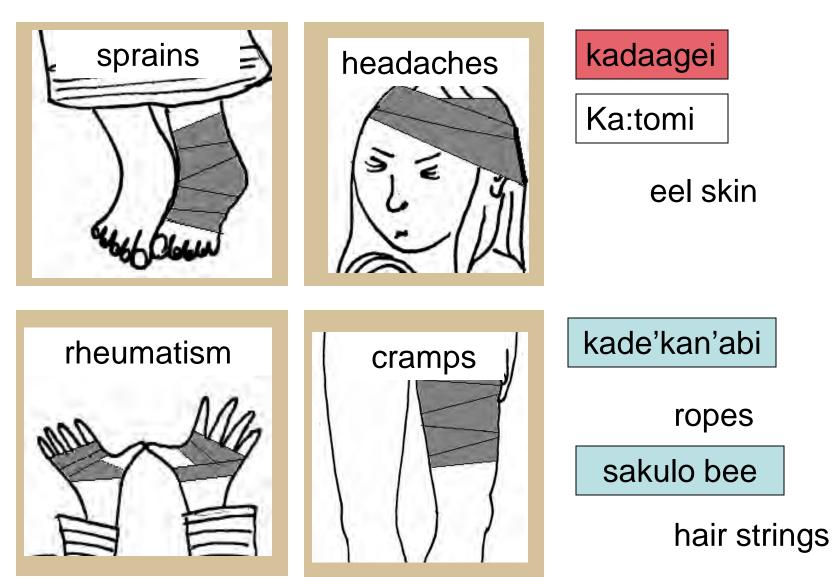




(Social Research for Sustainable Fisheries & Paktnkek Fish & Wildlife Society 2002)



#### broken bones



(Wallis & Wallis 1955, Lacey 1977)

- 1.Organize secondary research
- 2.Share research plans (with Elders)
- 3. Briefly describe research (One-Pager)
- 4.Improve informed consent process
- 5. Provide visual interview guide
- 6.Prompt with visual (elicitation)
- 7.Record technical or spatial information
- 8.Communicate results



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

## Mi'kmaq Traditional Ecological Knowledge of Katew (American Eel):

qualitative research for integrative science education

### Sana Kavanagh

**Debert Elders Advisory Council** 

### **February 22 2008**

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

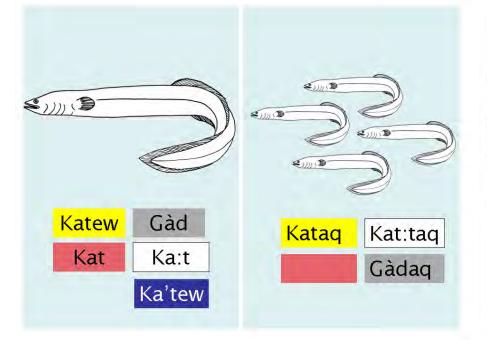
# Traditional Ecological Knowledge

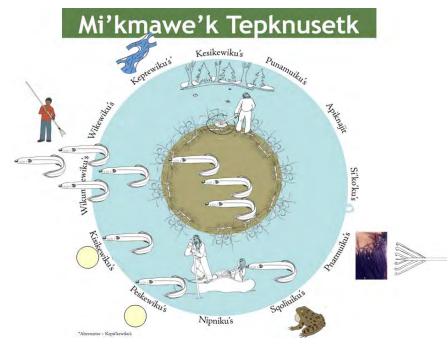
Knowledge

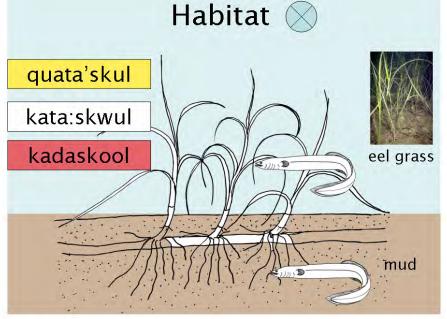
...about a particular place

## ...held by particular people

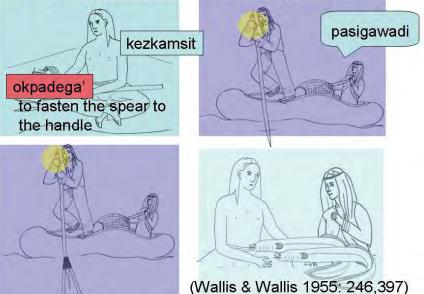
## ... in a particular time







#### story Origin of the Eel Spear





keeps hair tidy

prevents tangles

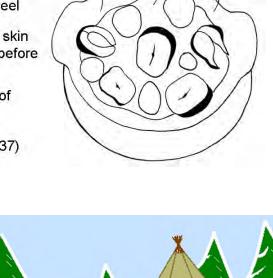
keeps hair dry

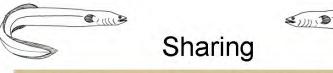
(Wallis & Wallis 1955; 126)



katu'apu eel stew skin is removed and eel is boiled with vegetables 'ki:sij baked eel eel slime is removed, skin left on, left overnight before being cooked baked under a layer of bannock or dough (Strouthes 1994:36-37)

Eel as Food



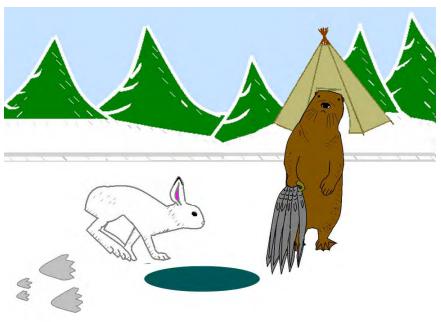


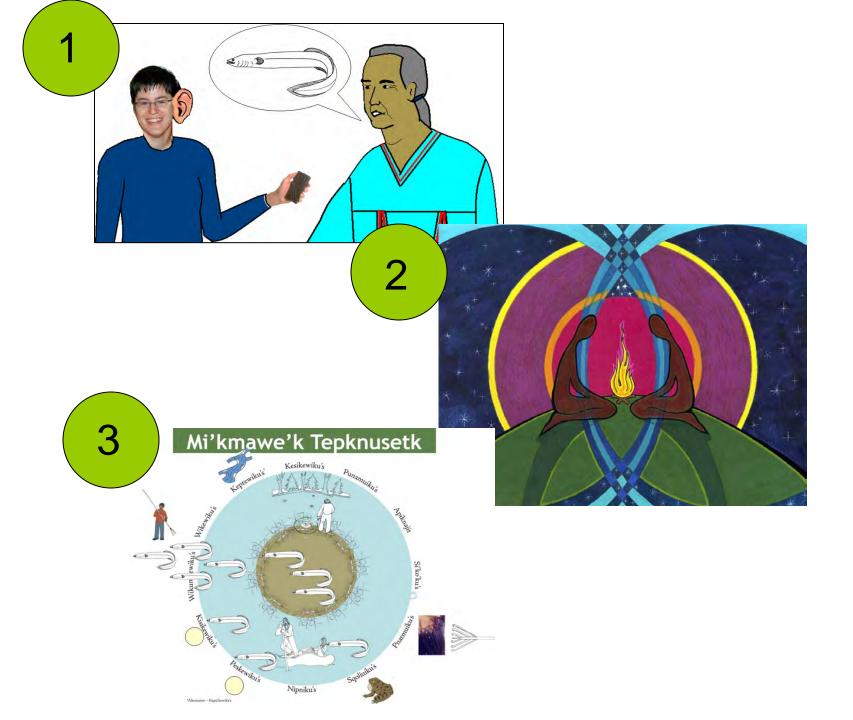
- · feasts, ceremonies, and community events
- shared with family and Elders
- shared in animal stories

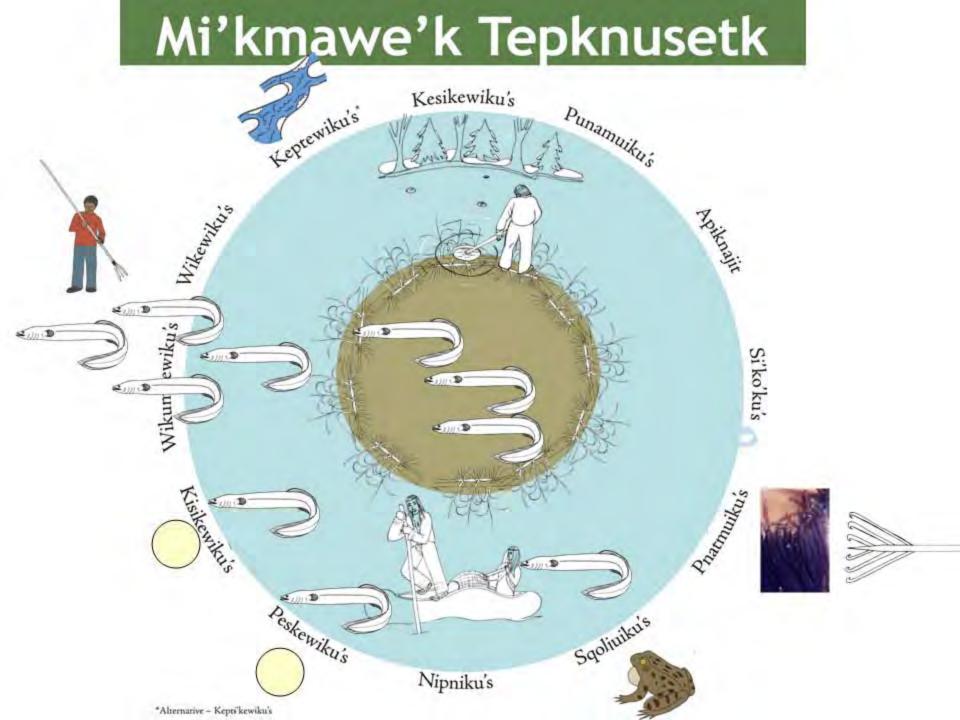




(SRSF & PFWS 2002, Davis et al 2004, Wallis & Wallis 1955: 415-16, 438)







### Unama'kik

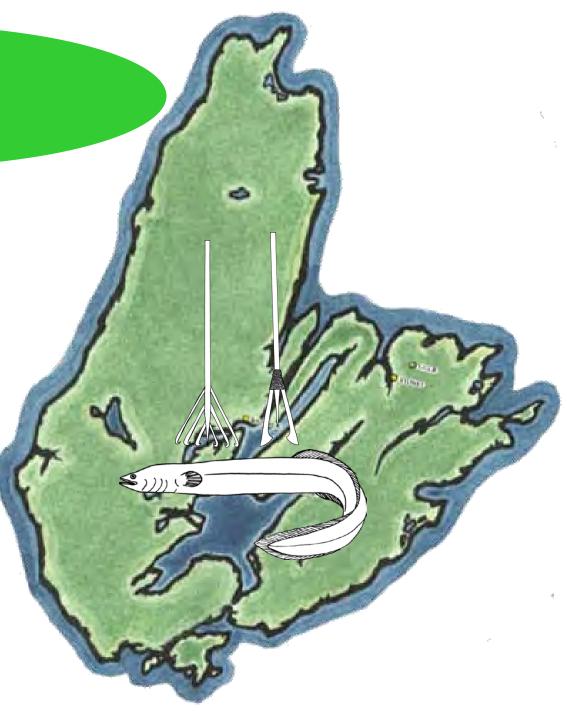
### Eskasoni

Membertou

Potlotek

Wagmatcook

We'koqma'q



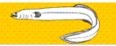
1.Organize secondary research2.Share research plans (with Elders)

## 3. Briefly describe research (One-Pager)

4.Improve informed consent process

- 5. Provide visual interview guide
- 6.Prompt with visual (elicitation)
- 7.Record technical or spatial information
- 8.Communicate results

"Mi'kmaq traditional ecological knowledge of eels: qualitative research for integrative science education"



#### Description:

This research uses interviews to learn about Mi'kmaq knowledge, values and activities related to eels. This research will help to make educational materials that incorporate the strengths of both Mi'kmaq and western scientific knowledge.

#### **Research Objectives:**





Interview Elders and Knowledge Holders

Compare Western and Mikmag scientific knowledges focusing on their strengths



Make visual and hands-on educational materials and activities

#### **Research Questions:**

 What is the Mirkmag traditional ecological knowledge (which includes knowledge, practices and beliefs) related to the American eel?

- 2. What do Milkmag Elders identify as important TEK of the American eel?
- What TEK of American eel is appropriate to document and include in integrative science education for Mikmag students?
- 4. Can the concepts of TEK and integrative science education be refined based on the case of Mi/kmaq TEK of American eel?

 In answering the above questions, have I been mindful of the needs of, and possible benefits to, Mikmaq communities related to this research?

#### Ethics Review:

This research is approved by Mi'kmaq Ethics Watch, Dalhousie Social Sciences and Humanities Research Ethics Board and Cape Breton University Research Ethics Board.

#### Data Storage:

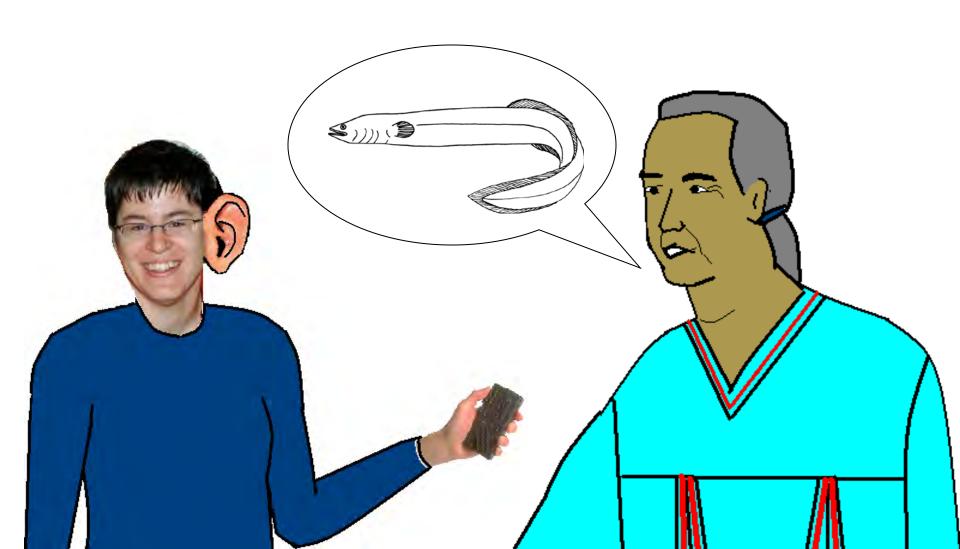
The data from this research (interview tapes and transcripts) will be stored at the Mi'kmag Resource Center.

#### Researcher:

wela'lin

My name is Sana Kavanagh. This research is part of a Masters in Environmental Studies thesis at Dalhousie University. It is also part of my work as Research Assistant for the Integrative Science Program, Cape Breton University.





Artist: Basma Kavanagh

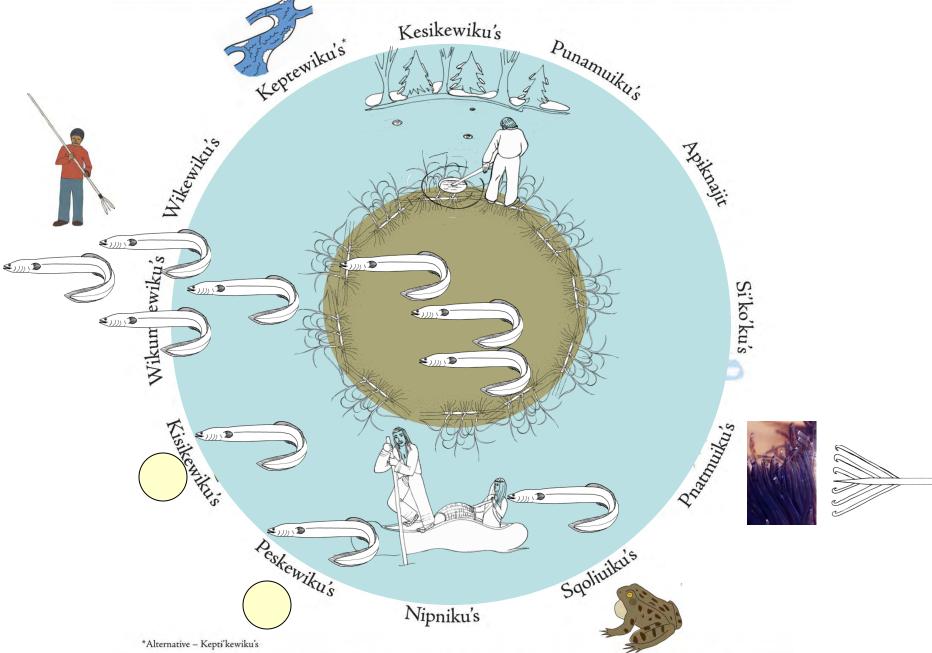
 $\checkmark$ 

ж

+

×

# Mi'kmawe'k Tepknusetk



1.Organize secondary research 2.Share research plans (with Elders) 3.Briefly describe research (One-Pager) **4.Improve informed consent process** 5. Provide visual interview guide 6. Prompt with visual (elicitation) 7.Record technical or spatial information 8.Communicate results

# **Informed Consent Process**



CONSENT FORM page 1/8: "Mi'kmaq traditional ecological knowledge of American eel: qualitative research for integrative science education"

Hi, my name is Sana Kavanagh. I am from Westmount, Cape Breton. I would like to do research with Mi'kmaq Elders from Cape Breton about Mi'kmaq traditional ecological knowledge of American eel. The title of my project is "Mi'kmaq traditional ecological knowledge of American eel: qualitative research for integrative science education". Would you take a moment to learn about my project and decide if it would be something you would like to participate in?







### CAPE BRETON UNIVERSITY

#### **Research Assistant**

I am a research assistant for the Integrative Science program at Cape Breton University. This program brings together Aboriginal and Western science knolwedge. By doing this research, I will be fulfilling part of my job



Graduate Student

I am a Masters of Environmental Studies student at Dalhousie University. By doing this research, I will be fulfilling part of the requirements to get a masters degree.

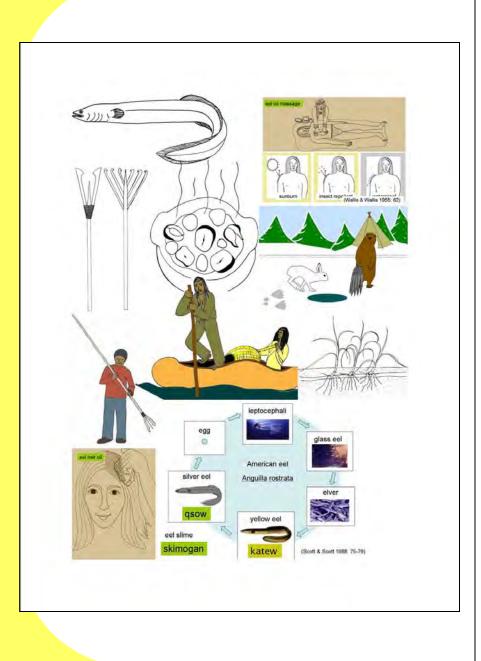
- 1.Organize secondary research
- 2.Share research plans (with Elders)
- 3. Briefly describe research (One-Pager)
- 4.Improve informed consent process

## **5.Provide visual interview guide**

- 6.Prompt with visual (elicitation)
- 7.Record technical or spatial information
- 8.Communicate results

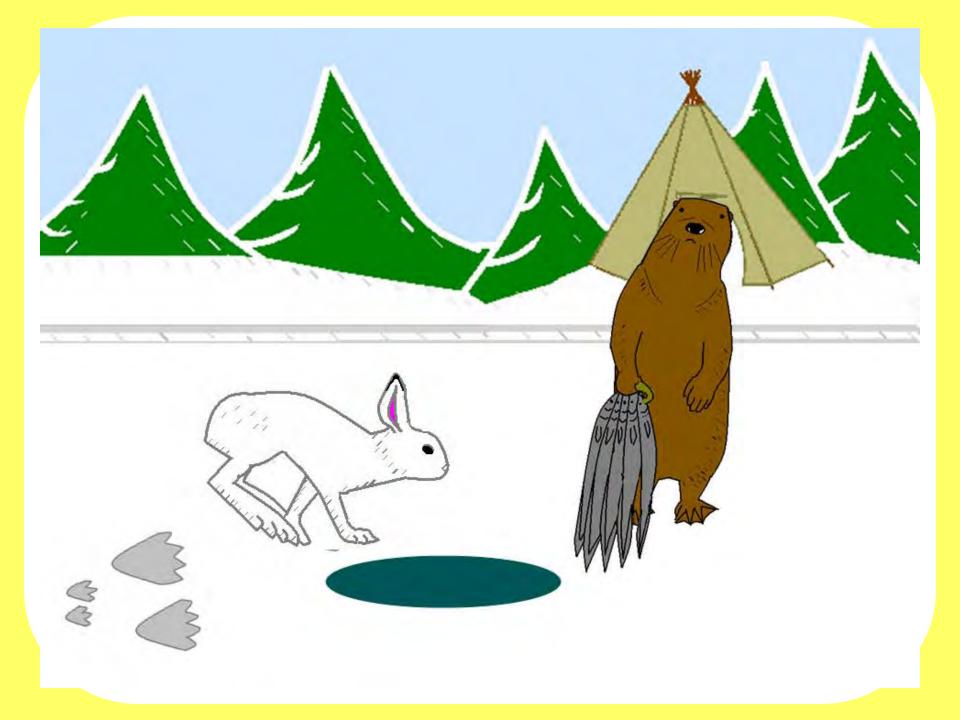
# Visual Interview Guide





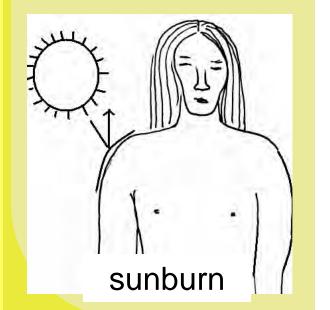
Try sets of questions for each practice (e.g. when you smoke an eel, when you drain an eel for oil, how do you do it? Or, what do you do step by step?) What do you do when you go eeling? What do you know about eel? How do you catch eel? Where do you go in looking for eel? What do you believe about eels? What beliefs about eels are important to you? What should people know about eel? Can you describe an eel to me? Would you tell me a story about eel? How are eel used? Why do you catch eel? What to you do with eel once you catch them? Do you eat eel? How often do you go eeling? How do you prepare eel? How do you prepare and cook eel? What do you do with eel once you catch it? Who taught you about eel? How did you learn about eel/harvesting eel? What are Mi'kmag words for eel and eeling? Where do you go to find eel? What types of places are eel found? When do you go eel fishing? How do you know when to go? What tools do you use when you're eeling? What is an eel like through its life? Why do you do it that way? Do you know more than one way to do it? Is this the traditional way? How did you learn how to do this? How did you learn about the eel? Can you tell me about the first time you went eeling? Can you tell me about that last time you went eeling? Can you tell me a story about going eeling? What is it like to go eeling? What is it important for Mi'kmag science students to learn about eel? Is this something students could or should learn about at school? How would you teach youth about this? What would you teach you about this? What is the Mi'kmag relationship with the American eel? Is American eel important? Why? Probes: Can you tell me more about that? When you say, " ", what do you mean? Can you explain it to me the way you would to a young person who was just learning?

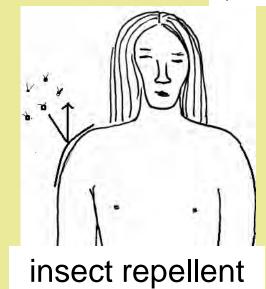
1.Organize secondary research 2.Share research plans (with Elders) 3.Briefly describe research (One-Pager) 4. Improve informed consent process 5. Provide visual interview guide 6.Prompt with visual (elicitation) 7.Record technical or spatial information 8.Communicate results

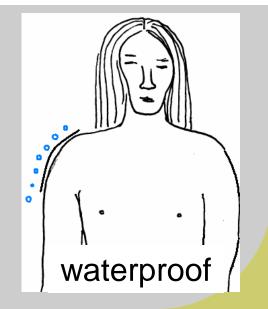


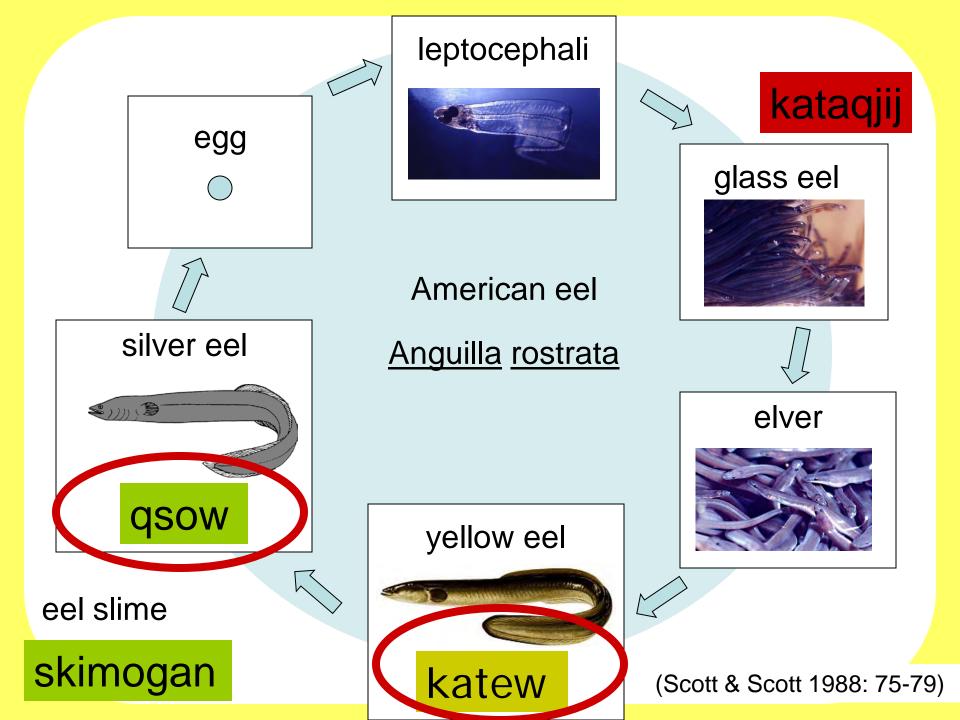


### (Wallis & Wallis 1955: 62)







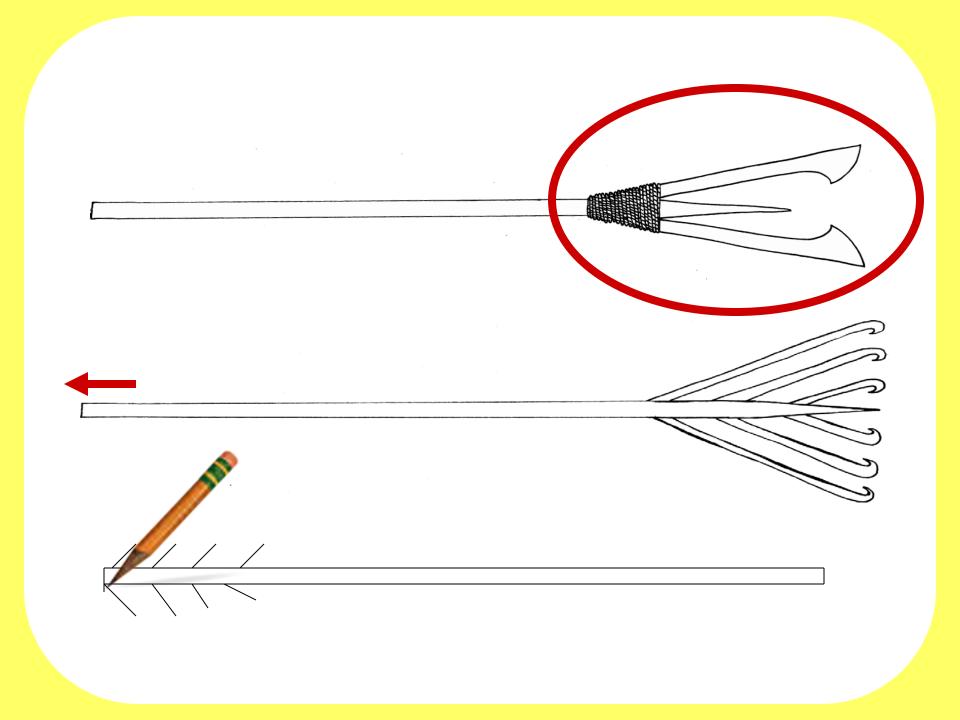


# **Using Visuals in Interviews**

- 1.Organize secondary research
- 2.Share research plans (with Elders)
- 3. Briefly describe research (One-Pager)
- 4.Improve informed consent process
- 5. Provide visual interview guide
- 6. Prompt with visual (elicitation)

7.Record technical or spatial information

8.Communicate results

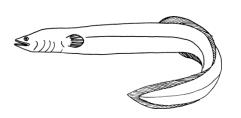


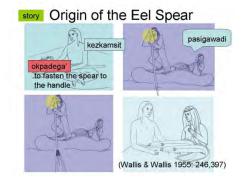
# **Using Visuals in Interviews**

1.Organize secondary research 2.Share research plans (with Elders) 3. Briefly describe research (One-Pager) 4. Improve informed consent process 5. Provide visual interview guide 6. Prompt with visual (elicitation) 7.Record technical or spatial information 8.Communicate results

# **Types of Visuals**



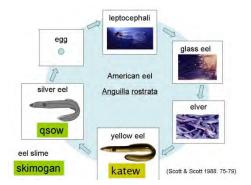




### photograph

drawing

#### storyboard





film

diagram

map

# Visuals are constructed

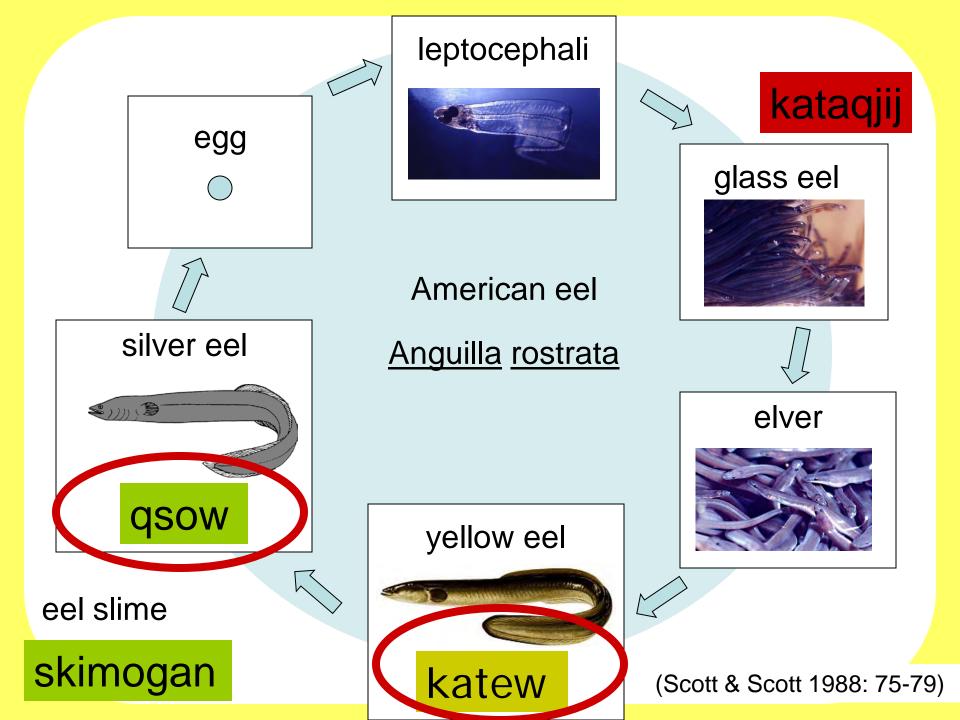
 $\rightarrow$ 

9



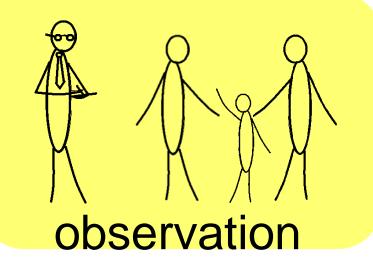
## Visuals can be coded

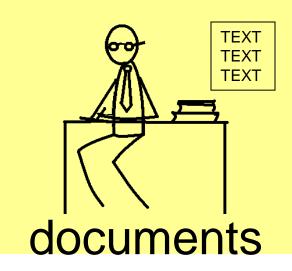


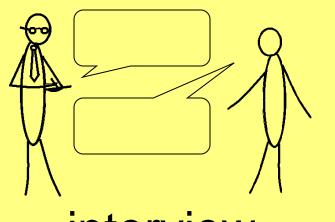


(Creswell 2003)

# **Qualitative Data Collection**







interview



# out<mark>side</mark> perspective

## "sh<mark>ow me</mark>"



# Observation

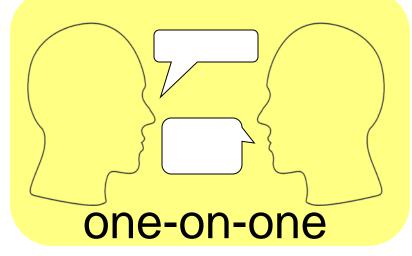
0 0

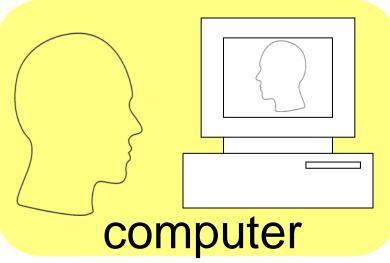
#### (Creswell 2003)

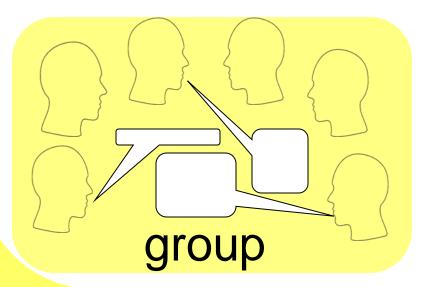
### Interviews

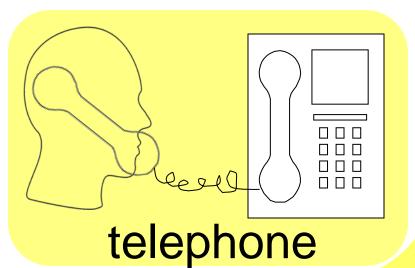
### face to face

### distance

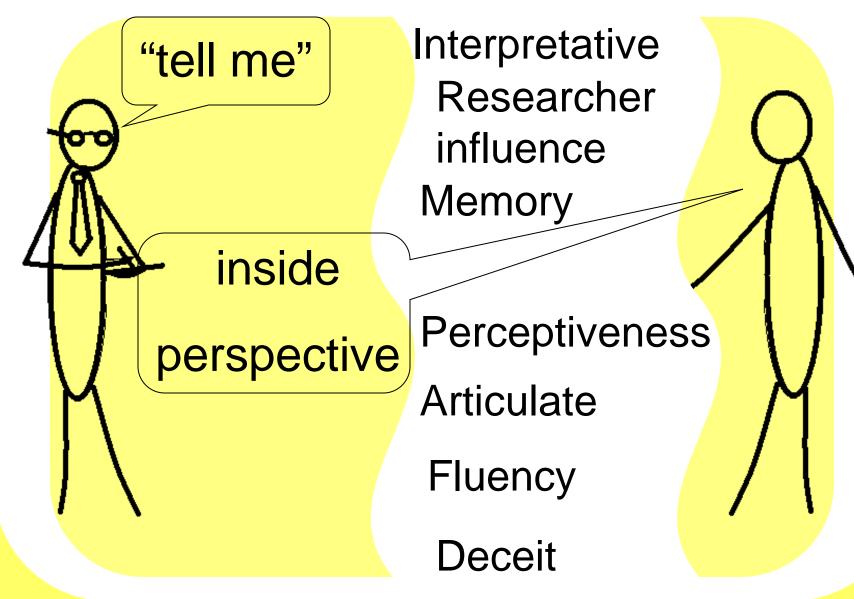




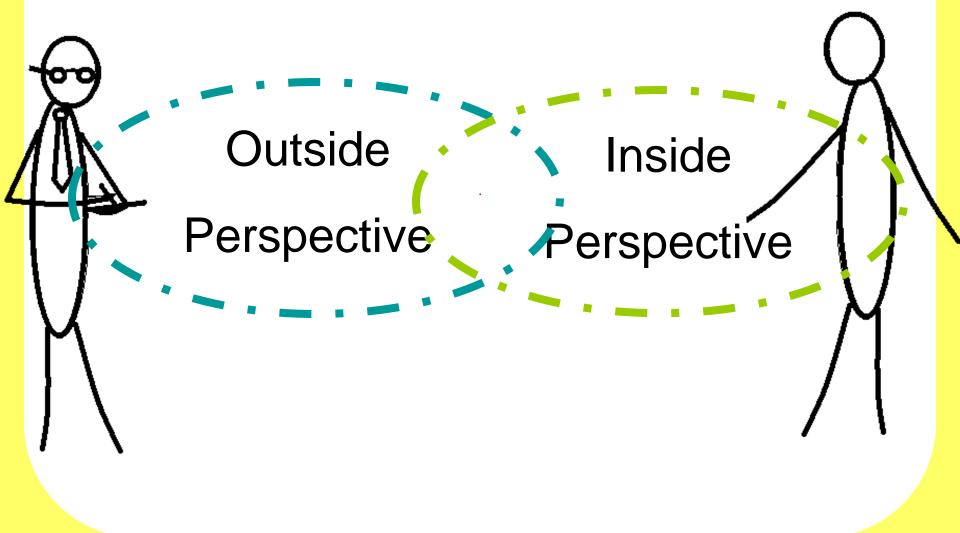




# Interviews



## "Crisis of Representation"



# "Crisis of Representation"

Structured versus unstructured

Perspective

Outside

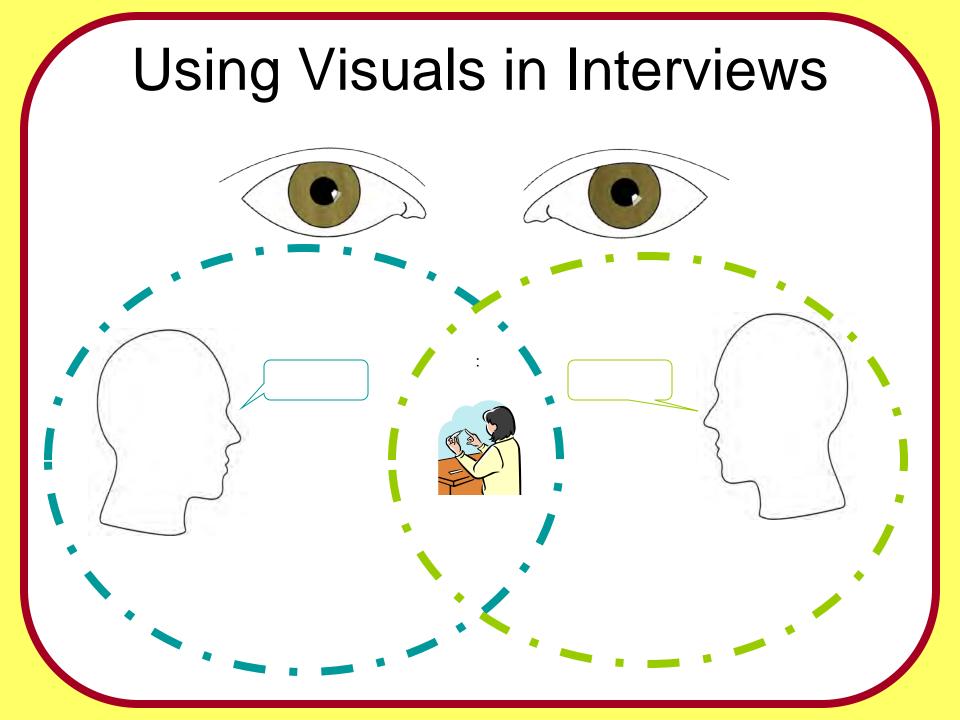
Perspective

Inside

Open versus closed questions

# We See Uniquely







#### Picturing Human Health and the Environment: First Steps ... from "Co-Learning Journey" to "Two-Eyed Seeing"

Sana Kavanagh<sup>1</sup>, Cheryl Bartlett<sup>2</sup>, Nadine Lefort<sup>3</sup>, Murdena Marshall<sup>4</sup>, & Albert Marshall<sup>5</sup>

This poster shows how visuals helped facilitate discussion among university researchers, health and environmental professionals, and Mi'kmag community members about Mother Earth and her lessons for humans about health, healing and wholeness in an Aboriginal community-based, participatory action research project based on Cape Breton Island, Nova Scotia.

Via our work, we concluded that visuals can help a group to reach: + a shared understanding of how to talk together. . a shared vision of how to work together. + a shared understanding of terms and concepts.

#### Project Title

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

#### Starting Points

- · Spiritual connectedness with the land can be re-kindled and developed as a positive option within health and healing processes in modern Mi'kmag communities.
- · General understandings about common ground and differences between Aboriginal and Western thinking can be shared such that these understandings can facilitate new health options for Mi'kmag communities as well as future research partnerships.

#### Goals

- · Establish a research partnership with Mi'kmaq community input participation, and guidance.
- · Create a new path of mutual trust and mutual respect between university researchers, health and environmental professionals, and Mi'kmaq communities.
- · Co-learn about traditional knowledge that can promote improved health, particularly among young people in Mi'kmag communities.

#### Co-Learning Approach

- Our Co-Learning Approach involved:
- · Learning together
- . Learning from each other
- + Learning the common
- · Learning the differences

#### Guiding Wisdom

Our Co-Learning Approach was guided by the following wisdom: 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,



This research was funded by the Canadian Institutes of Health Research - Institute of Aborginal Peoples' Health (2003-2006. 1 MES (candidate) at Dathousie University. Integrative Science research assistant. Cape Breton University 2 PhD, Canada Research Chair in Integrative Science, Department of Biology, Cape Breton University, 3 MEEO (oardiduse) at Royal Roads University, Entegrative Science research assistant, Cape Breton University: 4 MEd, Elder and Spiritual Leader, Eskasoni Milamaq First Nation, Associate Professor Irctiredi of Milamag Studies, Cape Briton University: 9 Elder, Eskasoni Mi'kman First Nation and Unama'ki Institute of Natural Resources

#### **Co-Learning Journey**

A shared understanding of how to talk together This visual is based on the Medicine Wheel (or Circle of Learning) which is a commonly used Aboriginal teaching tool. The visual shows that within the discussion, all have a role to play. Each person has an opportunity to speak, to share, to teach, and to learn.



Each participant gains some new understandings of Mother Forth and her lessons for humans about health, healing and wholeness based on sharing. listening. and discussing.



#### **Two-Eyed Seeing**

A shared vision of how to work together

CAPE BRETON UNIVERSITY

Two-Eved Seeing is a vision of how to work together which was one of the new understandings that emerged during the "Integrative Health and Healing" project. Two-Eyed Seeing is learning to see from one eye with the strengths of Aboriginal knowledge, and from the other eye with the strengths of Western knowledge, and to using both these eyes together, for the benefit of all. Thus, Two-Eyed Seeing intentionally and respectfully brings together our different ways of knowing to motivate people, Aboriginal and non-Aboriginal alike, to work together.

Creating a visual for Two-Eved Seeing has helped us share the spirit of mutual respect and trust which is an essential part of collaboration.



the best of the best of Aboriginal Western Knowledge Knowledge

Two-Eyed Seeing was brought forward by Elder Albert Marshall of Eskasoni Mi'kmaq First Nation during the Integrative Health and Healing Project. In his words:

"Two-Eyed Seeing is and has to be your Guiding Principle as to how you should live while you are here on this Earth. Our journey here is not meant for one perspective or one consciousness to get us through We all need each other. The lesson that we are trying to put forth for our young people is



that it's going to be much more expedient if we can take the best of whatever tools the white man has brought forth and the tools our forefathers have left us with ... to use all our gifts so we leave the world a better place and thus the opportunities for our children and youth will not be compromised by our inactions today

#### Concepts + Terms A shared understanding

Visual icons were paired with verbal explanations to help participants look beyond terms and language to find common ground and differences in key concepts about health and the environment. Below are a few examples:







Relationships with the Lond

Spiritual

University Researchers & Students

perspectives based on Western, Aboriginal or

4

CIHR IRSC

#### First

**Elders & Special Guests** 

share their perspectives based

Elders and special quests

on Traditional Aboriginal

Knowledge, the Mi'kmog

worldview, and Western

Science.

Co-Learners

#### Understandings introduced with visual

explanations by first-yea Mi'kmog students from the Integrative Science program, a CBU scienc degree that brings together Aboriginal and Western scientific

#### **Community Representatives**

Individuals from Milkmag communities in Cape Breton share their understandings of the concepts introduced by students.

CAPE BRETON UNIVERSITY

understandings.

icons and verbal

#### **STRENGTHS IN OUR DIFFERENCES**

How "sense of connectedness" and "relationships with environment" in the Mi'kmag First Nation worldview help point the way to new possibilities for health promotion for all Canadians Cheryl Bartlett<sup>1</sup>, Sana Kavanagh<sup>2</sup>, Nadine Lefort<sup>3</sup>, Murdena Marshall<sup>4</sup>, & Albert Marshall<sup>5</sup>

CAPE BRETON UNIVERSITY

This poster features two comparative big picture perspectives on the environment based on simplified Aboriginal and Western worldviews. It asks the question: "Could an eco-reflective and participatory sense of connectedness with the environment, as seen in the Mi'kmag language and Indigenous Science, point to new possibilities for health promotion for all Canadians?"

#### TWO-EYED SEEING

Two-Eyed Seeing is learning to see from one eye with the strengths of Aboriginal knowledge, and from the other eye with the strengths of Western knowledge, and to using both these eyes together, for the benefit of all. Thus, Two-Eyed Seeing intentionally and respectfully brings together our different ways of knowing to motivate people. Aboriginal and non-Aboriginal alike, to work together. Two-Eyed Seeing is our preferred Guiding Principle for collaborative work involving the university and Mi'kmaq (Aboriginal) communities because it allows us to see strengths in our differences.

**Comparative Big Picture** Perspectives on the Environment





the strenaths of Aboriginal knowledge

the strenaths of Western knowledge WESTERN WORLDVIEW

English language and

Western Science

detached

Cogno-centric and

Sense of disconnectedness

ABORIGINAL WORLDVIEW

Mi'kmaq language and Indigenous Science

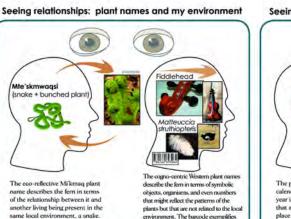
Eco-reflective and

participatory

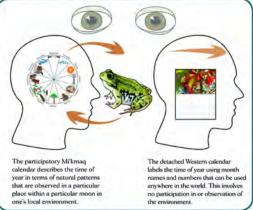
Sense of connectedness with one's environment

Two-Eyed Seeing was brought forward by Mi'kmaq Elder Albert Marshall of Eskasoni First Nation during an Aboriginal communitybased participatory action research project called "Integrative Health and Healing: co-learning our way to expanding wholeness through restoration of relationships with the land". This research project was based in Cape Breton and involved participants from the five Mi'kmag communities on Cape Breton Island and researchers from several universities in Eastern Canada, as well as Mi'kmag undergraduate science students. health professionals and environmental professionals. The project was funded by the Canadian Institutes of Health Research -Institute of Aboriginal Peoples' Health (2003-2006).



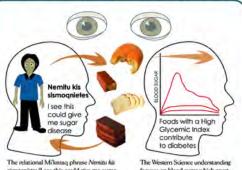


Seeing relationships: time of year and my environment



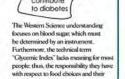
#### Seeing relationships to promote healthy lifestyles: my thoughts, my health, and my environment

extreme detachment from environment.



sismognietes (I see this could give me sugar disease) describes health information in terms of the relationship between self and food (in one's environment). This participatory and eco-reflective understanding makes one's personal role and responsibility in health easier to see and enact.

CAPE BRETON UNIVERSITY



health is not immediately apparent.

demonstrates an understanding of health information based on personal action, relationships and responsibilities.

lapju

nemitu kis

opla'lates

miluaili

I see this

could harm

my baby

The relational Mi'kmaq phrase lapju

nemitu kis opla'lates mijuajij (1 sec

this could seriously harm my baby)

The Western Science understanding labels a condition but not the human or environmental relationships that can contribute to health problems. This explanation is more abstract, quite static, and much less participatory.

Foetal

Alcohol

Syndrome

Chail Count Research Chair in Inspirate Scince, Department of Husing, Capit Barron University 'L. MIS Kanchdau' a Daleman University Integrated Scince insuled handbarr. Capit Write Horneys V. MIS Constitution Recol Husing University insules that and Relating the Scince insuled handbarrow. Capit Scince University 'A WIS Husing Recol Lealing, Education Manage Fred Nation, Associate Parliamer Ferdinal of Miching, Studies Capit Barrow Linearity 'T Educ.









INCORPORATED

Health Research Pro

Â.

FOUNDATION

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

**IWK Health Centre** 

Foundation

Mi'kmaq College Institute Mi'kmaq Espi Kina'matno'kuom The support of various partners and funding agencies (re Integrative Science research) is gratefully acknowledged.

Mermaíd Theatre.

of Nova Scotia