

**SCOPE** --ing  
a professional development  
program

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# *Our community...*

## *Science Practitioners*

Facilitate, coordinate, conduct, fund, regulate and promote science activities

Develop science-related policies

## *Science Professionals*

Have expert and specialized knowledge

Apply that specialized scientific knowledge in professional practice

# *Our community...*

*Almost 200 members*

YG employees

College faculty

Federal employees

Consultants

First Nation employees

Students

*In a variety of disciplines*

Physical sciences

Biological sciences

Health sciences

Social sciences

Engineering

Humanities

Science education

# *Our community...*

## *Commonalities?*

Ask questions

Collect data

Analyze data

Disseminate findings

Support and inform  
decision-making

## *Differences?*

Roles and  
responsibilities

Specialized skills and  
knowledge

Experience

# *Professional Development*

## *Informal*

Coffee chats

Lunch-and-learns

Workshops

Conferences

Networking events

Field tours

Mentoring

## *Formal*

Staff development offerings

Continuing education at Yukon College

Certificates

Diplomas

Degrees, etc.

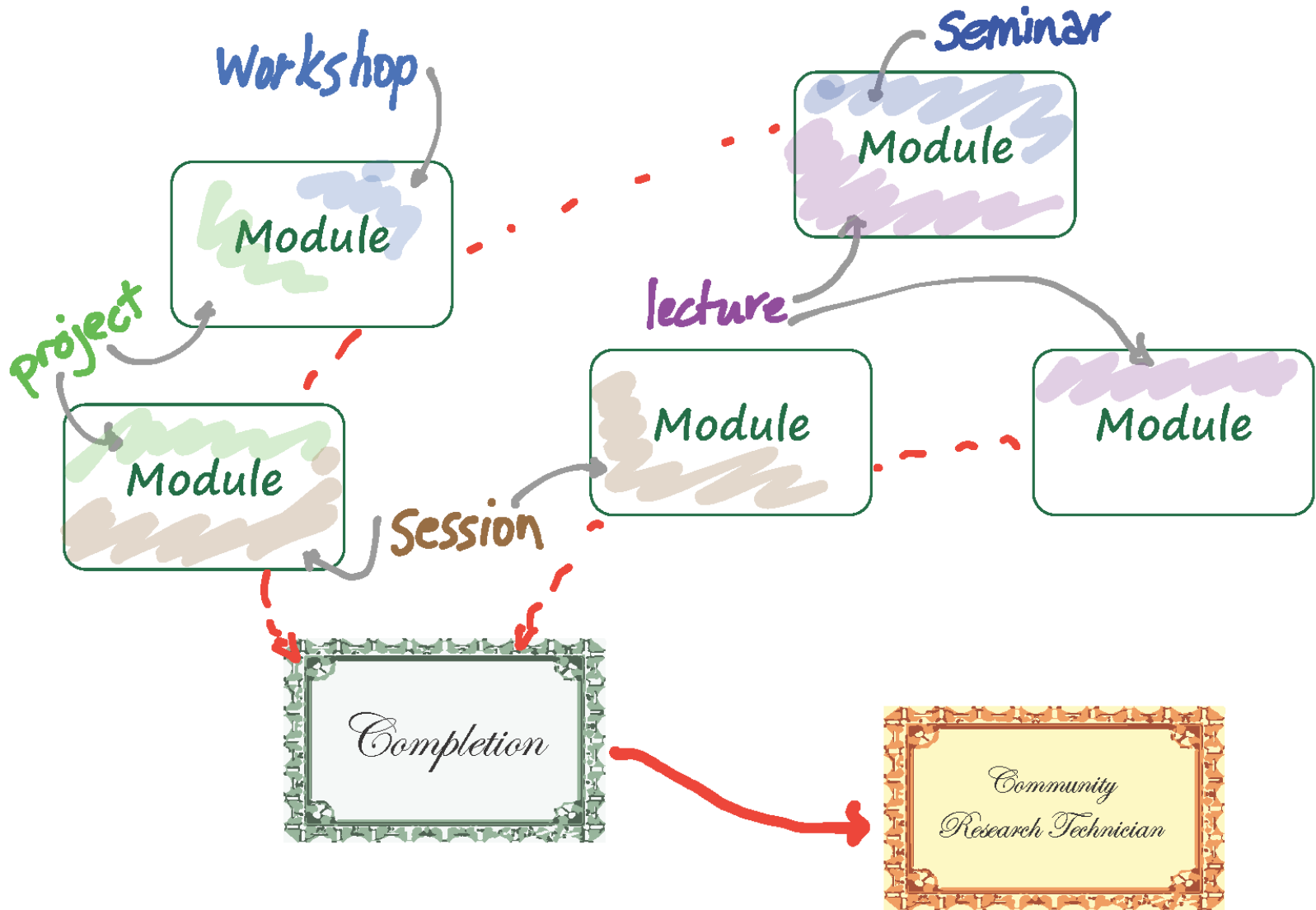
# *Possible audiences?*

1. Science practitioners, professionals or technicians desiring professional development
2. Students seeking training and experience to work as a science practitioner or professional in a Yukon or northern Canadian agency



How do the needs of these audiences differ?

# Possible elements?





# *Possible elements?*

## **Module component formats (PD?)**

- Short sessions or workshops by members
- offered through the

## **Module delivery → Certificate of Completion?**

- YG Staff Development Branch, YG units?
- Yukon College Continuing Education Division
- Yukon Research Centre
- Science Community of Practice

## **Destination: YC certificate, diploma**

“Community Research Technician” for example

# Possible benefits?

*beers!*

1. A flexible and scaleable training program designed to develop core competencies of a Yukon or northern-based science practitioner/technician. *interesting*
2. Decreased reliance on Outside researchers. *practical*
3. Greater opportunities for collaboration amongst program participants. *networking*
4. Improvements in scientific capacity and literacy in Yukon. *useful*
5. Enhanced reliability and validity of evidence used to make decisions in Yukon. *serious*
6. Expanded knowledge base on which to make decisions in Yukon. *good*

*Fun!*

Now it's your turn!  
Think, Pair, Share



Think



Pair



Share

# Question 1

What **knowledge, skills** and **abilities** do Yukon **science practitioners** and **professionals** **need** to be **effective, successful** and **efficient** in their roles?

## *Question 2*

**What do we need in a  
professional development /  
training program for Yukon  
science practitioners and  
professionals?**

# Brainstorming a community research technician training program:

Course	Modules (e.g.)
<b>Introduction to research in the north</b>	History of northern research; Practical and ethical aspects of conducting and reporting research; The state of contemporary northern research in a variety of disciplines
<b>Ethics in northern research</b>	Research misconduct; bias, conflicts of interest; animal subjects; human subjects; authorship, publication and peer review; collaboration and mentoring
<b>Principles of study design</b>	Choosing an academic home; Designing your contribution e.g. qualitative, quantitative and mixed methods; experimental design evaluation of research design and outcomes
<b>Research methods</b>	Survey design; focus groups; oral histories; Interviews; participatory methods
<b>Data analysis</b>	Data management; data visualization; techniques for analyzing quantitative data; techniques for analyzing qualitative data
<b>Science communication</b>	Identifying and communicating to your audiences; scientific/technical writing
<b>Science policy</b>	The role of the scientist in successful science policy integration; the role of the policy maker in successful science policy integration; elements of successful science-policy integration
<b>Case studies seminar course</b>	This course will involve teaching case studies to assist students in internalizing knowledge gained through course work
<b>Capstone project</b>	This course will involve participation of the student in designing, implementing and reporting on a concise study in partnership with a local agency