



**Town Hall Meeting**  
**Research Priority Team 6:**  
**Education and knowledge-sharing in and about**  
**the Arctic: Research and Practice**

ICARP IV Summit Meeting  
Boulder Colorado  
March 2025

# Agenda

- Overview of ICARP IV process (IASC)
- RPT 6 team
- RPT 6 topic & processes
- Preliminary research needs & priorities specific to RPT
- Cross-cutting themes
- Feedback and input
  - What is good?
  - What would you eliminate?
  - What are we missing?
  - Ideas for implementing these topics & barriers to doing the research



# RPT 6 Team

## Co-Chairs



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Our topic:



*Education and  
knowledge-sharing in  
and about the Arctic:  
Research and Practice*



# How did we get here?

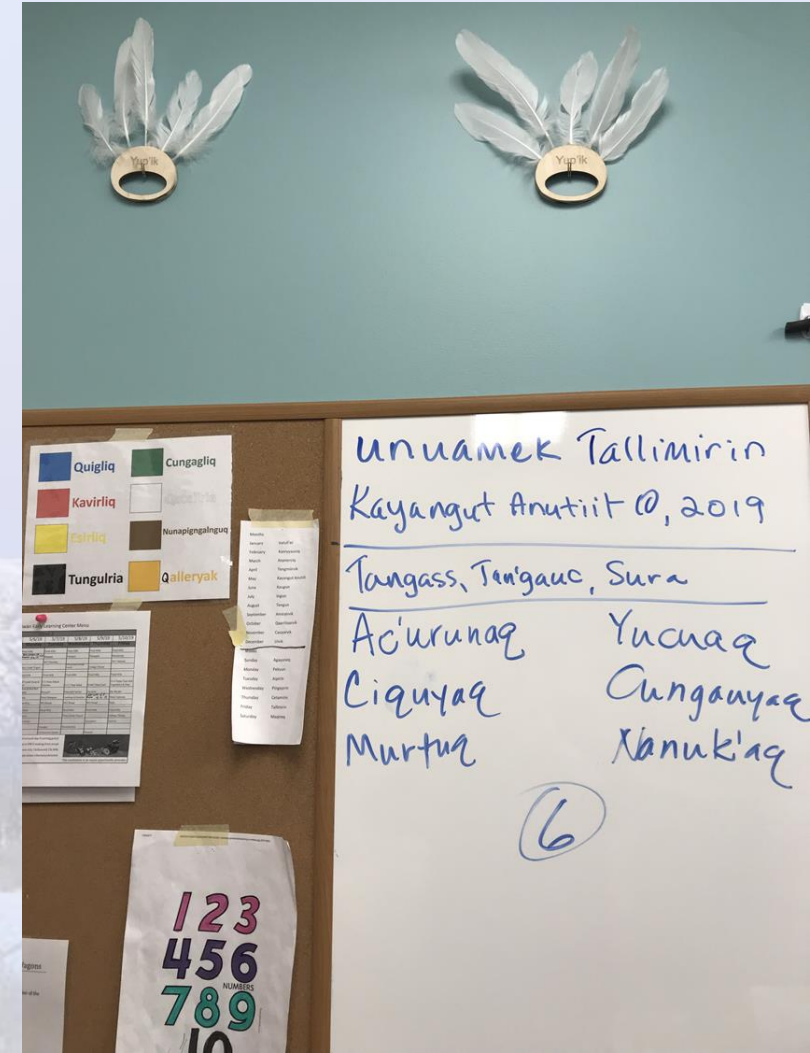
- Initial meeting ASSW 2024 in Edinburgh
  - Title was: Preparing present and future generations through Education, Outreach, Communication, Capacity Building, and Networking
- Discussed input about early input from survey, other sources, our group
- Decided to change the title to reflect multiple topic areas, including that education in the Arctic is a research area separate from needed efforts to foster education about the Arctic and connections between Arctic researchers and education... research & practice to recognize both roles
- Also, expanding from education to education and knowledge-sharing to include Indigenous knowledge systems, education in non-institutional settings - on the land, in communities, in museums etc.



# *Education and knowledge-sharing in and about the Arctic: Research and Practice*

## Two foci:

- 1) Questions around needed research on education in the Arctic
- 2) What needs to happen to strengthen engagement between Arctic researchers and educators/how to better share Arctic research with students & communities



# Draft needs/priorities/cross-cutting themes input to date collected via:

- Continued feedback from IASC ICARP survey
- UArctic input
- UArctic thematic network on teacher education for social justice and diversity webinar
- Polar Educators International discussions

## Still to be added

- Feedback from ASSW 2025/ICARP IV meetings (including today)
- Document analysis of national/regional research plans and other documents

# Draft Research Needs for the RPT 6 topic area

Research Need	Description / Definition of the Research Need	Rationale why included in this report
1. Formal /secondary level Arctic Education resources and research need to be co-designed /co-produced with local and Indigenous communities to ensure equitable partnerships and meaningful outcomes. (Principles for practice)		
2. We need to collectively define the key information about the Arctic that should be disseminated as well as the barriers, gaps, and needs in support of formal teaching and informal public engagement in and about the Arctic		



# Draft Research Needs for the RPT 6 topic area


Research Need	Description / Definition of the Research Need	Rationale why included in this report
3. We need strategies to ensure that educators worldwide know about and can access curated materials and the essentials that should be taught about the Arctic. (that has to be defined: see 2)		
4. Identify what is needed to plan, train, and evaluate science communications and education outreach for early career Arctic researchers (this is likely a cross-cutting theme)		
5. We need to shorten the lines of communication between Arctic science policymaking and education and outreach work. And, the excellent work that is being done on a volunteer basis needs to be supported		

# Draft Research Priorities for the RPT 6 topic area

Priorities for Research (e.g. research priorities or other priorities that impact research)	Reason/ Rationale why this
1. Researchers need to study multiple approaches for transforming education so that it better meets the needs of and represents Arctic peoples and places. Sub questions include: 1) How can communities, educators, and students decolonize educational processes at the primary, secondary, and postsecondary levels? 2) How can educational systems build on the wisdom of past generations? 3) What are best practices in land-based & place-based education in the Arctic?	should be an ICARP IV Priority
2. Research is needed on methods of working with elders, knowledge bearers, language keepers in the languages and identifying science terminology and knowledge in Indigenous languages. How do we co-construct the processes to build bridges between Indigenous knowledge, local knowledge, and Western science systems?	
3. We need to explore the role education in differing levels and settings plays in supporting sustainability in Arctic communities. Sub questions might include: What roles do secondary and post-secondary education school systems play in supporting sustainable development initiatives in Arctic communities? Are there other forms of knowledge sharing that are more relevant or effective in providing the skills and knowledge needed? Community driven verses external institution driven?	



# Draft Research Priorities for the RPT 6 topic area

Priorities for Research (e.g. research priorities or other priorities that impact research)	Reason / Rationale why this should be an ICARP IV Priority
4.How do we attract and retain educators, whether local or from outside the region? Sub questions include: How do we better support issues around teacher retention and their ongoing professional development, especially in rural areas that are so widely spread out and difficult to contact? So how do we use distance education? distance technology? How can local people as educators be seen or given the same opportunity or teacher accreditation with individualized training ?	One challenge is fewer science education specialists are being prepared, and those earning science ed degrees stay in the South and are less interested in going north
5.How do we bring together government, higher education, and community resources in support of heritage language revitalization? How, within those developing relationships, do we recognize the importance of protocols for honoring Indigenous knowledge systems and local knowledges? What strategies can effectively incorporate Indigenous languages and cultural values into Arctic education, and how does this impact community resilience?	

# Cross-cutting Needs and Priorities (relevant for more than one RPT)

Research Need	Description / Definition of the Research Need	Rationale why included in need this report (e.g. feasibility, impact, scale)
1.Enhance resources devoted to training polar ECR including around how to collaborate with educators in schools, universities and in other settings		
2.Evaluate effectiveness and impact of education and outreach activities and the success of science communication	There is a need for identifying methods, tools, metrics for assessing the impact or success of the broad range of education and science communication activities and whether they change public understanding and policymaking	Qualify and quantify the impact of polar outreach



# Cross-cutting Needs and Priorities (relevant for more than one RPT)

Research Need	Description / Definition of the Research Need	Rationale why included in need this report (e.g. feasibility, impact, scale)
3. How can young people in Arctic regions be effectively engaged in education, research planning and decision-making, and what pathways can sustain their involvement?		
4. How can outreach activities done by scientists be fostered, measured and better honored	Have outreach count toward promotion, tenure, Have a way to rate or measure activities, like that for scientific publications (impact factor). Maybe even require as part of PhD.	Having such a system would significantly raise the amount of outreach done by the research community

# Cross-cutting Needs and Priorities (relevant for more than one RPT)

5. Enhance resources devoted to training Arctic (or polar) scientists in all fields of Arctic science in working with educators (especially Early Career Researchers training in Arctic institutions abroad, and for traveling)

Coordination at the international level on funding for education is necessary to maximize the effort. Questions are: 1) How to ensure that the education programs for Early Career Scientists respect the research priorities identified in ICARP? (e.g. subject of grant programs). 2) How to ensure that grant programs are coordinated at the international level between funding agencies, in order to maximize the effort? Which are the coordinating bodies to which national/local agencies can refer to? Can IASC be such a coordinating body?



# Feedback and input (on post-its or verbally)

- What is good?
- Are there questions you'd eliminate?
- What are we missing? What are your ideas for research priorities and needs?
- Ideas for implementing these topics & barriers to doing the research



# More ideas? Please reach out to us!

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