

Knowledge Mobilization in Community-based Arctic Research

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TABLE S1. An overview of key Indigenous groups and languages spoken across the North American Arctic.¹

Region	Population identifying as Indigenous	Indigenous languages spoken
Alaska	15% of the population identify as an Alaskan Native Tribal group member. Recognized tribal groups: Yupik, Inupiat, Dene, Tlingit-Haida, Aleut, and Tsimshian	Twenty recognized languages: Ahtna, Unangam Tunuu/Aleut, Alutiiq/Sugpiaq, Dena'ina, Deg Xinag, Eyak, Gwich'in, Haida, Han, Holikachuk, Inupiaq, Koyukon, Tanana, Tanacross, Tlingit, Tsimshian, Upper Kuskokwim, Upper Tanana, Central Alaskan, Yup'ik Siberian, Yupik
Yukon	25% of the population identify as Indigenous (majority First Nation). 14 recognized groups of First Nation communities: Carcross/Tagish First Nation, Champagne and Aishihik First Nations, First Nation of Na-Cho Nyäk Dun, Kluane First Nation, Kwanlin Dün First Nation, Liard First Nation, Little Salmon/Carmacks First Nation, Ross River Dena Council, Selkirk First Nation, Ta'an Kwäch'än Council, Tr'ondëk Hwëch'in, Teslin Tlingit Council, Vuntut Gwitchin First Nation, White River First Nation The region also has eight transboundary Indigenous groups: Gwich'in Tribal Council, Tetlit Gwich'in Council, Inuvialuit, Acho Dene Koe First Nation, Kaska Dena Council, which represents Daylu Dena Council, Dease River First Nation, Kwadacha First Nation, Taku River Tlingit First Nation and Tahltan Central Council	Eight Indigenous language groups: Gwich'in, Hän, Kaska, Northern Tutchone, Southern Tutchone, Tagish, Upper Tanana, Tlingit
Northwest Territories	50% of the population identify as Indigenous. About 9% are Métis, 11% are Inuvialuit, the Dene make up about 30% of the territorial population. Five main Dene groups: Chipewyan, Tłı̨chǫ, Yellowknives, Slavey (North Slavey and South Slavey), and Sahtu Dene.	Eleven official languages: Chipewyan, Cree, Tłı̨chǫ, Gwich'in, North Slavey, South Slavey, Inuktitut, Inuvialuktun, Inuinnaqtun, English, and French
Nunavut	85% of the population are Inuit	84% of residents speak an Inuit language
Inuvialuit Settlement Region	57.3% identify as Inuit	19% of residents speak an Inuit language
Nunavik	88.9% are Inuit	89% of residents speak an Inuit language
Nunatsiavut	88.8% of the population are Inuit	14% of residents speak an Inuit language

¹ Sources: (Dorais, 2010; Larsen and Fondahl, 2015; Statistics Canada, 2017; NWTT, 2019; U.S. Census Bureau, 2019; Government of Yukon, 2020).

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TABLE S3. Outline of coding categories.

Initial coding	Thematic coding (First round)	Thematic code (final)	Overarching principle	Cross-cutting principle
Flexible project design K Mb from the onset Planning – General Timing and logistics	Planning	Understand protocol	Principles of respect	
Cross scale Discussion and negotiation Engagement – Other Formal/mutual rules Long-term Participation Relationships Trust and respect	Engagement	Create meaningful relationships Understand protocol Reconcile research	Principles of respect	Principles of researcher responsibility
2-way communication Communication – Other Frequent interaction Methods/tools Partnerships for communication Style	Communication techniques & tools	Tailor communication modes	Principles of mutual understanding	
Outputs Pertinence Quality Timeliness Uncertainty Usable science – General	Usable Science	Tailor communication modes	Principles of mutual understanding	
Coproduction Different ways of knowing Inclusive knowledge – General Integration process Local knowledge Practical knowledge Traditional knowledge	Inclusive knowledge	Include different knowledge systems	Principles of mutual understanding	
Adaptive Broad scale Context – Other implementation Local needs Problem insight – Solution insight	Context	Include different knowledge systems	Principles of mutual understanding	
Adapt products to fit culturally Cultural protocols Power relations and historical legacy Respect Risk perceptions	Cultural Values	Follow protocol Reconcile research	Principles of researcher responsibility	Principles of respect
Added following interview coding Understand protocol Acknowledge value of K Mb Reconcile research	“Shift” “They get it”	Acknowledge value of K Mb Reconcile research Create meaningful relationships	Principles of researcher responsibility Principles of researcher responsibility	Principles of respect