RESOURCE GUIDE FOR EDUCATORS

ARCTIC SERIES 2021

THE ARCTIC TODAY: INDIGENOUS PEOPLES, CLIMATE CHANGE & THE ENVIRONMENT

COMPILED BY:

RYAN HAUCK, JULIANNA PATTERSON, ADELINE PERKINS, & NATALIE NABASS
Session 1

INUIIT HOMELANDS & ARCTIC INDIGENOUS PEOPLES

February 25th, 2021
4:00 - 6:00 PM PST
# Table of Contents

Washington State K-12 Social Studies........................................................................................................pp. 4-6

Learning Standards.........................................................................................................................................p. 4

College, Career, & Civic Life C3 Frameworks for Social Studies State Standards...............................p. 5

Educating For Global Competence...........................................................................................................p. 6

Learning Objectives.....................................................................................................................................p. 7

Key Terms....................................................................................................................................................p. 8

Introduction to Session Speakers...............................................................................................................p. 9

Geography..................................................................................................................................................p. 10

Background on Inuit ..................................................................................................................................pp. 11-16

History of the Circumpolar World...............................................................................................................pp. 17-18

Governance................................................................................................................................................pp. 19-20

Inuit Peoples and Arctic Research...............................................................................................................pp. 21-22

Technological Innovations for a Sustainable Arctic..................................................................................pp. 23-24

Covid-19 Impacts on Inuit Communities.....................................................................................................pp. 25-26

Benefits in the Classroom............................................................................................................................p. 27

Curriculum Resources................................................................................................................................pp. 28-30

Photo and Chart Bibliography...................................................................................................................pp. 31-32

Thank You Sponsors....................................................................................................................................p. 33

---

# How to use this guide

GLOBAL CLASSROOM WANTS TO KNOW HOW YOU HAVE USED THIS RESOURCE PACKET IN YOUR CLASSROOM!

EMAIL GC@WORLD-AFFAIRS.ORG
A Note on Learning Standards Presented in this Guide

Three sets of standards have been linked to each of the learning objectives in this packet. The Washington State K-12 Social Studies Learning Standards and the accompanying Grade Level Requirements are the social studies standards for WA State.


Cross-objective standards are listed at the beginning of the packet, and content-specific standards can be found after each learning objective.

The standards provided have been selected for relevance, but are not exclusive: many other standards, such as Common Core, may be applicable to the resources and learning objectives identified in this packet. The intention for this packet’s organization is to provide educators with an idea of resources available and possible uses for resources. Users should feel free to create their own learning objectives and to select resources according to the specific needs of their classrooms.

The student understands and applies reasoning skills to conduct research, deliberate, and form and evaluate positions through the processes of reading, writing, and communicating.

WASHINGTON STATE K-12 SOCIAL STUDIES LEARNING STANDARDS

There are five EALRs in Social Studies, one for each of the discipline areas: civics, economics, geography, and history, and a fifth for social studies skills.

(1) Social Studies EALR 1: CIVICS
The student understands and applies knowledge of government, law, politics, and the nation’s fundamental documents to make decisions about local, national, and international issues and to demonstrate thoughtful, participatory citizenship.

(2) Social Studies EALR 2: ECONOMICS
The student applies understanding of economic concepts and systems to analyze decision-making and the interactions between individuals, households, businesses, governments, and societies.

(3) Social Studies EALR 3: GEOGRAPHY
The student uses a spatial perspective to make reasoned decisions by applying the concepts of location, region, and movement and demonstrating knowledge of how geographic features and human cultures impact environments.

(4) Social Studies EALR 4: HISTORY
The student understands and applies knowledge of historical thinking, chronology, eras, turning points, major ideas, individuals, and themes on local, Washington State, tribal, United States, and world history in order to evaluate how history shapes the present and future.

(5) Social Studies EALR 5: SOCIAL STUDIES SKILLS
The student understands and applies reasoning skills to conduct research, deliberate, and form and evaluate positions through the processes of reading, writing, and communicating.
The C3 Framework is organized into the four Dimensions, which support a robust social studies program rooted in inquiry. The four Dimensions are as follows:

(1) Developing questions and planning inquiries;
(2) Applying disciplinary concepts and tools;
(3) Evaluating sources and using evidence;
(4) Communicating conclusions and taking informed action

Each disciplinary subsection has three to four additional categories, which provide an organizing mechanism for the foundational content and skills within each discipline.

### C3 Framework Organization

<table>
<thead>
<tr>
<th>Civics</th>
<th>Economics</th>
<th>Geography</th>
<th>History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic and Political Institutions</td>
<td>Economic Decision Making</td>
<td>Geographic Representations: Special Views of the World</td>
<td>Change, Continuity, and Context</td>
</tr>
<tr>
<td>Participation and Deliberation:</td>
<td>Exchange and Markets</td>
<td>Human-Environment Interaction: Place, Religions, and Culture</td>
<td>Perspective</td>
</tr>
<tr>
<td>Applying Civic Virtues and Dem-</td>
<td>The National Economy</td>
<td>Human Populations: Spatial Patterns and Movements</td>
<td>Historical Sources and Evidence</td>
</tr>
<tr>
<td>cratic Principals</td>
<td>The Global Economy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Causation and Argumentation</td>
</tr>
</tbody>
</table>
Global competence is the capacity and disposition to understand and act on issues of global significance” (Chapter 2).

Globally competent students are able to perform the following four competences:

1. **Investigate the world** beyond their immediate environment, framing significant problems and conducting well-crafted and age-appropriate research.

2. **Recognize perspectives** others’ and their own, articulating and explaining such perspectives thoughtfully and respectfully.

3. **Communicate ideas** effectively with diverse audiences, bridging geographic, linguistic, ideological, and cultural barriers.

4. **Take action** to improve conditions, viewing themselves as players in the world and participating reflectively.
Learning Objectives

1. Students will be able to identify and discuss elements of Arctic Indigenous culture.

2. Students will be able to analyze the biodiversity of the Arctic and discuss how Arctic Indigenous communities are leading conservation and research efforts in the region.

3. Students will be able to analyze past and current challenges facing Arctic communities through primary and secondary sources.

4. Students will be able to analyze and discuss the geography and history of the circumpolar world.

5. Students will be able to analyze and discuss the complexity of Arctic social and environmental systems from interdisciplinary perspectives.

6. Students will be able to identify, analyze, and discuss technological innovations for Arctic sustainability. In addition, students will be able to identify, discuss, and make connections between indigenous knowledge and environmental sustainability.

7. Students will be able to identify, assess, and discuss Arctic Indigenous agency, including the role of regional and local governments.

8. Students will be able to identify and analyze the impact of COVID-19 on Arctic communities and discuss efforts to address global health in the region.

9. Utilizing the Arctic as a case study, students will be able to evaluate and make connections between local and global issues across selected regions of the world.

Possible Guiding Questions

How do we learn best, and how should classes be designed to facilitate that learning?

How should we perform research on the environment?

How should we design conservation or environmental management programs?

What should sustainable development look like? How do we balance economic opportunity, environmental sustainability, and cultural resilience?

How can we deliver supportive and culturally sensitive social services given the Arctic context?

How should we design our governments?
Key Terms

Nunavut: The largest and northernmost of Canada’s territories, where 85% of residents are Inuit. Created in 1999 as separate from Canada's Northern Territories, it is also known as “Our Land” in Inuktitut.

Nunatsiavut: (meaning “our beautiful land” in Inuktitut) is the homeland of the Labrador Inuit (Labradormiut).

Inuvialuit: Originally occupied the western Canadian arctic coast from Barter Island in the west to Cape Bathurst in the east, as well as the northern portion of the Mackenzie River Delta. Numbering about 2000 during the 19th century, they formed the densest Inuit population in Arctic Canada.

Nunavik: The portion of land within the province of Quebec located north of the 55th parallel, covers approximately 500,000 km2 (representing more than one-third of Quebec's territory).

Inuit Nunangat: Name of the collective Inuit regions in Canada. Includes the regions of Inuvialuit (northern Northwest Territories), Nunavut, Nunavik (northern Quebec), and Nunatsiavut (northern Labrador). It also means, “land, water, and ice.”

Circumpolar North: Umbrella term used to describe the areas of the Arctic and Subarctic that include Canada, Finland, Denmark (Greenland and the Faroe Islands), Iceland, Norway, Russia, Sweden and the US (Alaska). Education of the circumpolar north includes understanding about the history and culture of the people inhabiting it, as well as learning about the environment and modern issues surrounding the area.

First Nations: is a term used to describe Indigenous peoples in Canada who are not Métis or Inuit.

Inuit: Arctic Indigenous persons who primarily inhabit Canada in Nunangat, though also live through the circumpolar north.

Métis: One of the Aboriginal peoples of Canada with European descent via the French and Scottish who intermarried with Aboriginal women in the 1700s.

Assembly of First Nations: National advocacy group representing over 900,000 First Nation residents in Canada. It's role includes facilitating national and regional discussions on legal and policy issues while connecting with private, public and Commonwealth sectors.

Geopolitics: The study of international and inter-state relations connecting to geographic influence in a certain region.

Yakutia: Sakha, also known as Yakutia or Yakutiya, and officially known as the Republic of Sakha, is an example of one region out of many Arctic Indigenous regions in the federal Russian republic.

Arctic Council: The only international forum where nation-states are members and Indigenous groups are Permanent Participants—there are six Indigenous Permanent Participant organizations on the Arctic Council.
Introduction to Session
Speakers

**Victoria Qutuuq Buschman** is an Iñupiaq (Inuit) wildlife and conservation biologist partially raised in Utqiagvik, Alaska & now living in Nuuk, Greenland. She has lived & worked across the Arctic in an effort to promote how Indigenous Peoples fundamentally shape Arctic biodiversity conservation, from research, to management, to actualizing the dreams of new protected areas. Her research challenges the colonial legacy of conservation & instead promotes partnerships with Indigenous communities, knowledge, & governance to develop ethically-conscious, culturally-relevant, & fully knowledge-based conservation efforts in the Arctic.

**Jason Young** is a Senior Research Scientist with the University of Washington (UW) Information School, Affiliated Faculty with the UW Canadian Studies Center, and the inaugural Research Fellow at the UW Center for an Informed Public (CIP). His research leverages participatory methods to understand the socio-cultural impact of information technologies on rural & Indigenous communities, & he has carried out community-based projects in the Canadian Arctic. He teaches UW’s introductory course to Arctic diplomacy, & leads the UW Arctic Minor’s scholarship-to-policy initiative.
Indigenous population in the Arctic

Indigenous population as a share of total population, in %

- no indigenous
- < 5
- 5 - 25
- 25 - 50
- 50 - 75
- > 75

Peoples included:
- Alaska: Alaska Natives (Iñupiat, Yupik, Aleut, Eyak, Tlingit, Haida, Tsimshian, and a number of Northern Athabaskan cultures); Canada: First Nations, Inuit and Métis; Greenland: Inuit; Finland, Norway, Sweden: Sámi; Russia: The Indigenous small numbered peoples of the North, Siberia and the Far East, Komi and Yakuts

Regions included:
- US - Alaska; CA - Yukon, Northwest Territories, Nunavut, Newfoundland & Labrador, Northern Quebec; Gl; IS; FO, NO - Nordland, Troms, Finnmark, Svalbard, SE - Norrbotten; Fi - Lappi; RU - Komi, Arkhangelsk, Nenets, Khanty-Mansi, Yamalo-Nenets, Krasnoyarsk, Sakha, Kamchatka, Magadan, Chukotka.

Data sources: Canada (2016), Greenland (2017), Russia (2010); NSIs; Finland & Norway & Sweden: Nordregio estimated base on data from National Sámi parliaments; Alaska (2016): Department of Labor and Workforce Development Research & Analysis Section; Russia: Census 2010
**Background on Inuit**

**The Inuit**

The term Inuit refers broadly to the Arctic Indigenous population of Alaska, Canada, and Greenland. Inuit are also in Chukotka, Russia. Inuit means “the people,” and they speak the Inuit language, though there are regional dialects that are known by different names. For centuries these communities have relied on their natural resources, strong leaders, and innovative tools and skills to adapt to the cold, harsh environments of the Arctic north.

**Inuit or Eskimo: Which name to use? Alaska Native Language Center**

Although the name “Eskimo” was commonly used in Alaska to refer to Inuit and Yupik people of the world, this usage is now considered unacceptable by many or even most Alaska Natives. Alaska Natives increasingly prefer to be known by the names they use in their own languages, such as Inupiaq or Yupik.

**The World is Changing for Greenland’s Native Inuit People**

Inuit were mostly isolated for millennia, until modern times. Now they are adapting but their lives are affected by a contemporary world that is placing limits on how they can hunt and a changing climate that is affecting their environment.

**Nunavut: History, Population, Map, Flag, Capital and Facts, Britannica.**

Created in 1999 out of the eastern portion of the Northwest Territories in Canada, Nunavut (one of four Inuit regions in Canada) encompasses the traditional lands of the Inuit, the indigenous peoples of Arctic Canada (known as Eskimo in the United States); its name means “Our Land” in Inuktitut.
**Inuit**

The largest employer in Nunavut is government. New jobs are rapidly emerging in the mining and resource development sectors. Growth is also occurring in the tourism sector, in fisheries, and in Inuit art such as carvings and prints. Suicide remains a deep problem in Inuit communities. In Nunavut the suicide rate is nearly six times the national average. Changes have transformed the Canadian Arctic, often to the disadvantage of the Inuit people. After decades of seeing changes forced on them, today the Inuit have embarked on a cultural and political renaissance and are working to take back power over their lands, communities, institutions and future.

**How Cellphones and Facebook Are Changing Remote Nunatsiavut**

Inuit communities have long struggled with not only access to cellular coverage, but to adequate Internet speeds. As recently as two years ago, bandwidth was so limited in Nain that even the local government employees had difficulty sending files among each other. Now that access has improved, many from older generations worry that the young will lose their culture. “A lot of young Inuit aren’t connecting with the land anymore because they can do it so much more easily online. It’s good that they’re learning more about their culture on social media, but you can’t get the same connection online as you can from actually going out on the land.”

**High-fat Diet Made Inuits Healthier but Shorter Thanks to Gene Mutations**

A new study published in Science shows that adaptation has led to genetic mutations in Greenlandic Inuit’s that help them counteract the bad effects of their high-fat diet, based heavily on fish and marine mammals.

**Fast Fact:** The Canadian Inuit are descendants of the Thule people who lived around 1000 years ago.
NOTE: There are more Inuit regions in Canada and many Arctic Indigenous peoples in the circumpolar world. Here are just two examples.

**Nunavut, Canada, USA Today, November 13, 2018.**

In this one minute overview, learn about Nunavut, Canada’s youngest territory and one of the largest, most pristine expanses of wilderness left on the planet. Humans have lived here for more than 4,000 years. In this natural paradise above the Arctic Circle, travelers experience the Inuit way of life, witness awe-inspiring natural wonders and observe spectacular Arctic wildlife.

**Nunavut, The Canadian Encyclopedia, May 29, 2020.**

Nunavut’s formation represented a moment of great political significance; through political activism and long-term negotiations, a small, marginalized Indigenous group overcame many obstacles to peacefully establish a government that they controlled within the Canadian state, thereby gaining control of their land, their resources and their future. As such, the creation of Nunavut represents a landmark moment in the evolution of Canada and a significant development in the history of the world’s Indigenous peoples.

**About the Republic of Sakha (Yakutia), Ammosov North-Eastern Federal University, 2020.**

The Republic of Yakutia is the largest administrative and territorial subdivision in the world and accordingly, the largest part of the Russian Federation. Over 40% of its territory is beyond the Arctic Circle. Yakutia is called ‘the treasury’ of Russia. According to one ancient Siberian legend, God once was flying over Yakutia with a bag of ‘earth treasures’. Because of the extreme cold he had frozen his hands, and he spilled all the wealth in this country. Yakutia, indeed, is one of the richest regions in the world in terms of natural resources.

Yakutia was established as an autonomous republic of the Soviet Union in 1922. The Yakut, a people who formed from the mixture of local tribes with Turkic groups that migrated from the south in the 6th–10th centuries AD, joined the Russian state in the first half of the 17th century. Economic conditions reflect the remoteness and harsh physical conditions of Sakha. Agriculture is possible only in the south along the Lena River and its tributaries.

Yakutsk: Journey to the Coldest City on Earth, Independent, January 21, 2008.

Yakutsk is a remote city in Eastern Siberia (population 200,000) famous for two things: appearing in the classic board game Risk, and the fact that it can, convincingly, claim to be the coldest city on earth. In January, the most freezing month, average "highs" are around minus 40°C.


A news channel funded by the Russian Government explores what it is like to live in Yakutia. They interview locals from all backgrounds to learn about their experiences and lifestyle.
HARVESTING AND HANDICRAFT ACTIVITIES AMONG INUIT: FINDINGS FROM THE 2017 ABORIGINAL PEOPLES SURVEY

Many harvesting and handicraft activities contribute to economic well-being but can be difficult to measure. These include hunting, fishing and trapping, gathering wild plants, making clothing or footwear, and creating artwork like carvings or jewellery. The prevalence of these activities in the past year was assessed in the 2017 Aboriginal Peoples Survey (APS).

A larger share of Inuit in Inuit Nunangat compared with those outside Inuit Nunangat had participated in these activities (84% versus 62%).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percent within Inuit Nunangat</th>
<th>Percent outside Inuit Nunangat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunting, fishing or trapping</td>
<td>65%</td>
<td>37%</td>
</tr>
<tr>
<td>Gathering wild plants</td>
<td>47%</td>
<td>30%</td>
</tr>
<tr>
<td>Making clothing or footwear</td>
<td>34%</td>
<td>12%</td>
</tr>
<tr>
<td>Creating carvings, drawings, jewellery, or other kinds of art</td>
<td>17%</td>
<td>22%</td>
</tr>
</tbody>
</table>

About one in six (16%) Inuit aged 15 or older did these activities for income.

Participation in these activities varied by men and women.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percent of Inuit men</th>
<th>Percent of Inuit women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunting, fishing or trapping</td>
<td>66%</td>
<td>4%</td>
</tr>
<tr>
<td>Making clothing or footwear</td>
<td>47%</td>
<td>4%</td>
</tr>
<tr>
<td>Gathering wild plants</td>
<td>66%</td>
<td>33%</td>
</tr>
<tr>
<td>Creating carvings, drawings, jewellery, or other kinds of art</td>
<td>6%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Source: Aboriginal Peoples Survey, 2017
Hunting, Herding, Fishing, and Gathering: Indigenous Peoples and Renewable Resource Use in the Arctic

Indigenous peoples throughout the Arctic maintain a strong connection to the environment through hunting, herding, fishing, and gathering renewable resources.

Food Insecurity: Arctic Heat Is Threatening Indigenous Life

Subsistence hunters in the Arctic have long taken to the sea ice to hunt seals, whales, and polar bears. But now, as the ice disappears and soaring temperatures alter the life cycles and abundance of their prey, a growing number of indigenous communities are facing food shortages.

Experience a Traditional Whale Hunt in Northern Alaska | Short Film Showcase

On the sea ice in northern Alaska, the Inupiat wait for the whales. The tradition spans 1,000 years, and a successful catch will feed an entire community for the winter.

Indigenous People and Polar Bears

Polar bears have played an important role in indigenous Arctic cultures for thousands of years. In parts of the Arctic, the Inuit and other indigenous people still hunt the polar bear as part of a subsistence lifestyle and long-held cultural traditions. These hunts are now carefully regulated to ensure the bears are not over-harvested.

Animal Rights Activists and Inuit Clash Over Canada’s Indigenous Food Traditions

Despite a written exemption for Indigenous Inuit hunters, markets across the Arctic (both large-scale commercial and sustainable-use) crashed.
Why Scientists are Starting to Care about Cultures that Talk to Whales

“If you start looking at the relationship between humans and animals from the perspective that Indigenous people themselves may have had, it reveals a rich new universe,” says Matthew Betts. Medieval literature depicted the Arctic as a land of malevolent “monstrous fishes” and people who could summon them to shore through magical powers and mumbled spells. Even as explorers and missionaries brought back straightforward accounts of how individual whaling cultures went about hunting, butchering, and sharing a whale, it was hard to shake the sense of mysticism.

A New History of the North Pole

An extensive history of the inhabitants of the North Pole, including the Inuit, is examined. External and internal forces have shifted over the years as different resources in the area have been discovered and climate change has opened up more travel/exploration opportunities.

A Brief History of the Arctic Council

This infographic offers a glimpse into the history of the Arctic Council, telling a story of its achievements and its relationship with the rest of the world along the way.
**Arctic Security and Dialogue: Assurance through Defense Diplomacy**

For over two decades, key stakeholders have been confident that the Arctic Council was the appropriate forum for discussing most non-military Arctic issues. Today, security concerns are heightening with new Arctic players and the days of a stable Arctic region, free from intervening security concerns, may be facing headwinds as military activity and rhetoric have increased over the past few years. Strategic competition in the Arctic has reemerged and is bolstered by recent rhetoric and increased investment from Washington in its national security agenda in the Arctic as well as associated NATO military activity.

**International Inuit Organizations Launches New Podcast, Eyes on the Arctic**

The Inuit Circumpolar Council (ICC) launched a new podcast last week that the organization hopes will amplify the work, and artists, from the world’s four Inuit regions. “Our podcasts will bring you stories, testimonials, and reports from our four countries and beyond,” said ICC’s International Chair Dalee Sambo Dorough in a news release on August 6.
Governance


In all three types of agreements (land claims-based agreements, conflict- or crises-based co-management agreements, and multi-stakeholder environmental management agreements.), the state-sponsored institution of environmental resource management has played a pivotal role in marginalizing and muting Aboriginal systems of management, knowledge, authority, and responsibility—systems that have proven to be sustainable for generations. It would be difficult to conceive of a more insidious form of cultural assimilation than co-management as currently practiced in northern Canada. At the same time, certain steps may help redress some of the current systemic inequities in the Canadian co-management experience, thereby creating space for actual inclusion of Aboriginal peoples and their knowledge and management systems into co-management practice.


The Arctic and Northern Policy Framework is a profound change of direction for the Government of Canada. For too long, Canada's Arctic and northern residents, especially Indigenous people, have not had access to the same services, opportunities, and standards of living as those enjoyed by other Canadians. In a significant shift, the federal government, Indigenous peoples, Inuit, First Nations and Métis, 6 territorial and provincial governments (Yukon, Northwest Territories, Nunavut, Newfoundland and Labrador, Quebec, and Manitoba) contributed to this framework together.
How You Can Incorporate Indigenous Politics Into Your Curriculum:

1. Begin with a discussion of local knowledge systems, value systems, culture, and language
2. Have students roleplay as political consultants, supporting the design of a new government of political organization that reflects these values
3. Compare their ideas to real case studies
4. Can easily be expanded to domains like education, environmental studies or management/economic programs

Example: Sámi Politics

- Inuit and Sámi have been at the forefront of international political movements to support Indigenous governance
- Where Inuit have largely pursued self-rule, Sámi approach oriented more toward shared rule
- 1992 Sámi Conference emphasized that they do not demand a national state or changes to existing borders
- Self-rule is pragmatically difficult – gradual assimilation and urbanization
- But, self-rule may also be “an alien concept to a people who come from a stateless tradition” defined by migration and nomadism (Kuhn 2020)
- Explore what sovereignty and self-determination mean in the context of shared rule
Inuit Peoples and Arctic Research

As the Arctic thaws, Indigenous Alaskans demand a voice in Climate Change Research

The Navigating the New Arctic (NNA) initiative handed out its first round of grants totaling $37.5 million in October 2019, doubling the amount NSF spends on Arctic research. It aims to improve understanding of Arctic change, but also encourages scientists to enlist Indigenous communities in the “coproduction of knowledge” by involving them in planning and executing projects.

Involvement of local Indigenous peoples in Arctic research - expectations, needs and challenges perceived by early career researchers

Rapid changes in the natural and social environments of the Arctic region have led to increased scientific presence across the Arctic. Simultaneously, the importance of involving local Indigenous peoples in research activities is increasingly recognized for several reasons, including knowledge sharing and sustainable development. This study explores Arctic early career researchers’ (ECRs) perceptions on involving local Indigenous peoples in their research. The results, based on 108 online survey respondents from 22 countries, show that ECRs value the knowledge of local Indigenous peoples and generally wish to extend the involvement of this group in their research.

An Inuit Critique of Canadian Arctic Research

If research informs policy, and policy arguably leads to change, Inuit need to have a say in how research in Inuit Nunangat (Inuit homelands) is governed to better their lives. This piece filters such matters through the eyes of an Inuk, offering insights into current Arctic research governance, and maps out some of the solutions and opportunities for altering it in the interests of Inuit communities.

Network Connects Indigenous Knowledges in the Arctic and U.S. Southwest

Indigenous Peoples from the Arctic and the U.S. Southwest have joined together to tackle issues of food sovereignty in two environmental extremes. Their bond led to a swift response to COVID-19.
Achieving Equity and Representation for Indigenous Peoples in Arctic Research

Approximately 10 percent of the Arctic population are the Indigenous Peoples who have been the caretakers, observers, researchers, and an integral part of this important social-environmental system for thousands of years. On the front lines of climate change, Arctic Indigenous Peoples are living now with wide-reaching and drastic environmental, economic, and social change; the bulk of these changes are not of their own making. This is an invitation to Arctic Indigenous communities to add their own stories—narratives of history, research, culture and leadership—to the volumes of academic literature on observations and studies in the Arctic region. This is also a call to non-Indigenous researchers and others working in the Arctic to make space for other voices to be heard.

How Indigenous Knowledge is Changing What We Know About the Arctic

Arctic Peoples are more than just victims of climate change. In many parts of the circumpolar world, they're collaborating with scientists to unravel the unprecedented environmental transformation of the North. But these relationships aren’t always easy. In this Eye on the Arctic documentary report from Arctic Canada, we learn about some of the problems that still exist and profile a collaboration that this community says is an example of what happens when things go right.

Inuit, Minority Rights Group

The largest employer in Nunavut is government—federal, territorial and municipal. New jobs are rapidly emerging in the mining and resource development sectors. Growth is also occurring in the tourism sector, in fisheries, and in Inuit art such as carvings and prints. Suicide remains a deep problem in Inuit communities. In Nunavut the suicide rate is nearly six times the national average. Great changes have transformed the Canadian Arctic, often to the disadvantage of the Inuit people. After decades of seeing changes forced on them, today the Inuit have embarked on a cultural and political renaissance and are working to take back power over their lands, communities, institutions and future.
Technological Innovations for a Sustainable Arctic

On the front lines of climate change, Arctic communities use tech to keep tradition alive

Unlike in many regions of the world where climate change solutions are still talked about in the future tense, Indigenous communities are actively adapting their lives with technology as they see the changes happen in real time. Much of this technology is springing up from initiatives within the communities, after what Matthew Druckenmiller, research scientist at the National Snow and Ice Data Center in Boulder, Colorado, says are decades of failures by international global powers to tackle the crisis, which “has really set the stage for self determination.” Increased access to and involvement in scientific research is providing Arctic Indigenous peoples with the power to build solutions based on their first-hand experience of seeing environmental changes take place.

Technological Innovations for a Sustainable Arctic

The Arctic region is often seen as the barometer of climate change, a place where threat and opportunity coexist. There are limitations imposed by extreme weather conditions, the risk of shipping accidents, pollution of the marine environment and isolated living conditions that make building communication networks and infrastructure difficult. But as global warming accelerates the melting of sea ice in the Arctic Ocean, the once-frozen space has become more accessible and conducive to the development of resources and the use of sea routes. This is changing the region’s industry, economy, society and culture.

As the Arctic Melts, New Technologies Predict Where Sea Ice Will Be

The region’s waterways are increasingly open for business, with ships embarking earlier and returning later in summer, and researchers want to understand exactly how northern communities and industries use current sea ice predictions and charts to plan their operations and reduce economic and safety risks. This activity is only expected to increase in the coming years, as the European Arctic, the Northwest Passage and some areas in the Northern Sea Route experience less and less summer sea ice.
**Space Technology for a Smart and Resilient Arctic**

Polar Initiative, the Norwegian Embassy, and Arctic Frontiers hosts an in-depth program exploring the role of satellite technologies in current Arctic connectivity infrastructures and their continuing development.

<table>
<thead>
<tr>
<th>Proposed Technology</th>
<th>Technological Readiness</th>
<th>Specific Governance Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enhancing surface albedo</strong>&lt;br&gt;Making surfaces brighter to reflect solar radiation.</td>
<td>• Small scale trials using silica spheres, bubbles and foams are underway.&lt;br&gt;• Potential technical limitations to scale, scope and longevity of materials in situ.</td>
<td>• Regulatory and legal measures include customary international law, the LP, CBD and UNCLOS, but these may not be comprehensive and would apply to ocean-based activities only.&lt;br&gt;• Regional variation in impacts (e.g., temperature and hydrological) are expected and will require governance.&lt;br&gt;• Environmental protection and food safety regulations.</td>
</tr>
<tr>
<td><strong>Marine cloud brightening</strong>&lt;br&gt;Seeding and whitening clouds above ocean surfaces, most likely using sea salt spray, to reflect solar radiation back into space.</td>
<td>• Technology theoretical, based on natural analogues and computer models.&lt;br&gt;• Some potential for small scale outdoor experiments by 2020.</td>
<td>• Regulation would likely be covered by customary international law.&lt;br&gt;• The proposal to use sea salt may in due course be interpreted as a pollutant, and the technique would then be subject to the LP.&lt;br&gt;• Regional variation in impacts (e.g., temperature and hydrological).&lt;br&gt;• Social acceptability remains uncertain.</td>
</tr>
<tr>
<td><strong>Stratospheric aerosol injection</strong>&lt;br&gt;Reflective aerosols would be deployed in the stratosphere.</td>
<td>• Theoretical understandings of the technique only. Mechanisms not yet developed.&lt;br&gt;• Modelling suggests planetary cooling is possible.</td>
<td>• Unresolved, as there is no clear fora or entity to consider SA governance. Governance measures, however, may include state and customary law, UNEA, CBD, the UNFCCC and amended instruments which could include air pollution instruments, the Vienna Convention and others.&lt;br&gt;• Evidence suggests potential security issues may arise.</td>
</tr>
</tbody>
</table>
COVID-19 Impacts on Inuit Communities

Harvesting Programs Supporting Inuit Way of Life Amid COVID-19 Pandemic

In Arviat, Nunavut, the Harvesters Support Grant and the Young Hunters Program are coming together to build climate resilience, improve food security and increase community wellness and connection. It was co-developed in direct collaboration with Inuit partners to improve access to traditional foods and lower the high costs of hunting and harvesting.

Global Climate: Arctic Scientists Turn to Local Northern Communities for Support as Pandemic Sidelines Research

One of the untold science stories of the COVID-19 pandemic in Canada is the effect that it’s having on areas of research that have little to do with infectious disease. This year scientists are staying away to avoid carrying the pandemic to vulnerable communities in the North. COVID-19 may be transforming the character of Arctic research for years to come, in part by involving northern communities more directly in gathering data.


Nunavut remains the only state-level jurisdiction in North America not to record a single case of the virus that has sickened millions and killed more than 375,000 people worldwide. Every other Canadian province and territory and every U.S. and Mexican state has reported at least a few. A chronic shortage of housing in a territory where average temperatures are far below freezing most of the year means several generations typically live under one roof, making social distancing difficult.

After Going Weeks with No COVID-19 Cases, Nunavut Community Sees New Infections

The Nunavut community, which had been COVID-free since Jan. 2, now has 17 active cases of COVID-19.
**COVID-19 Delays Delivery of Apology to Inuit Residential School Survivors in Atlantic Canada**

Dwight Ball, premier of the Atlantic Canadian province of Newfoundland and Labrador, was supposed to travel to Nunatsiavut, the Inuit region of the province, in March to deliver an apology about the systemic abuses in Inuit schools, but the trip was called off due to COVID-19 travel and public health restrictions.

**Data Confirmed for Election of President of Inuit Government in Atlantic, Canada**

The government in the Inuit region of Atlantic Canada has confirmed that their rescheduled election for president will be on October 6, after being cancelled earlier this year because of COVID-19.

---

**Fast Fact:** With around 40,000 speakers, the Inuktitut language of Nunavut is one of the most widely spoken of the Inuit languages! The University of Washington counts itself as one of the only universities in the country that offers schooling in the Inuktitut language.
Benefits in the Classroom

- Opportunity for students to see common issues through a new lens
- Does not trap Indigenous peoples in the past
- Recognizes difference and complexity
- Focuses on Indigenous resilience and ingenuity, not just colonialism
- Invites Indigenous voices into the classroom

**Students on Ice**
An award-winning organization offering unique educational expeditions to the Antarctic and the Arctic. Our mandate is to educate the world’s youth about the importance of the Polar Regions, support their continued growth and inspire and catalyze initiatives that contribute to global sustainability.

**Students on Ice: Be A Part of the Journey**
Students on Ice is an award-winning organization that takes students from around the world on life-changing, educational expeditions to the Arctic and Antarctic.
Curriculum Resources

**Full Circle: First Nation, Metis, Inuit Way of Knowing**

This curriculum document was developed by Aboriginal teachers, and other educators with significant experience working with Aboriginal students. Topics covered include civics, science, health, history, geography, business, and social sciences.

**Through Mala’s Eyes: Life in an Inuit Community**

This series of lesson plans, built around the first-person narrative of a 12-year-old Inuk boy, will help you and your students appreciate life in the Inuit community of Salluit, in the northern part of Nunavik, Northern Quebec. Although designed for students from 9 to 12 years of age, some of the lesson plans and strategies in this unit can be adapted for other grade levels.

**The Virtual Museum of Metis History and Culture**

A Teachers’ Resource for First Nations, Métis and Inuit Education in Alberta.

**Native Land Map**

Interactive map allows you to see what the languages, traditional territories, and treaties are in an area.

**Inuit Teacher Resources**

A variety of resources for all age groups. Need to create a free account to access.
**Concept to Classrooms: Inuit People Lesson Plans**

6 part lesson plan focusing on different aspects of Inuit life

**Exploring Inuit Culture**

Multimedia learning material designed for grades 4-6, to teach students about the Inuit, the native people of the Canadian Arctic, and Nunavut, the newest territory in Canada established in 1999.

**Inuit- Cut, Sort, and Paste Activity**

(Grades 3-4) This worksheet uses facts about the Inuit. The students are able to sort the facts into four categories: Food, Shelter, Clothing, Location/Climate.

**Soap Sculptures**

(Grade 2-3) The purpose of this lesson is to teach students about Inuit soapstone carvings and to help them develop an understanding of some techniques, tools and carving materials. Students will learn that the birds and animals in Inuit sculpture have their own special character and they will aim to achieve that in a soap carving.

**Inuqatigiit: The Curriculum from the Inuit Perspective**

This K-12 curriculum was developed by a team of Inuit educators.

**Four Directions Teaching**

Four Directions Teachings is a visually stunning audio narrated resource for learning about indigenous knowledge and philosophy from five diverse First Nations in Canada.

**Deepening Knowledge**

Infusing Aboriginal Perspectives into Your Teaching Practice. University of Toronto

**Peoples under the Arctic Sky**

Beyond Penguins and Polar Bears is an online professional development magazine which focuses on preparing elementary teachers to teach polar science concepts while also integrating inquiry-based science and literacy instruction. The project draws on research showing that an integrated approach can improve student achievement in science, as well as in reading comprehension and oral and written discourse abilities. Ultimately, the project seeks to bring the polar regions “closer to home” for elementary teachers and their students.
Inuit BrainPop
Interactive lessons for all ages. Included are simulations, primary sources, worksheets, quizzes, related reading and more!

Empowering the Spirit: Educational Resources to Support Reconciliation
This website provides support for all levels within school jurisdictions to increase awareness, understanding and application of First Nations, Métis and Inuit histories, perspectives and ways of knowing for the purpose of implementing treaty and residential schools education and Truth and Reconciliation Commission Calls to Action for education.

Traditional Inuit Games
6th grade students in Nunavut gathered their favorite Traditional Inuit Games for other students to enjoy.

Walking Together
First Nations, Metis and Inuit perspectives in Curriculum.
Geography


Background on the Inuit People


Harvesting and handicraft activities among Inuit: Findings from the 2017 Aboriginal Peoples Survey


History of the Circumpolar World


Governance

“Governance.” Governance | WWF Arctic, arcticwwf.org/work/governance/. (Pg. 19).

Arctic Indigenous Peoples, Jason C Young, 25 February 2021 (Pg. 20).
Inuit Peoples and Arctic Research


“Podcasts Archive.” Submission Guides, arctic.ucalgary.ca/podcasts-archive. (Pg. 22).

Technological Innovations for a Sustainable Arctic


COVID-19 Impacts on Inuit Communities


Benefits in the Classroom


Arctic Indigenous Peoples, Jason C Young, 25 February 2021 (Pg. 27).

Curriculum Resources


Thank You to Our Sponsors:

The **World Affairs Council - Seattle**; the **Pacific Northwest National Resource Center on Canada** (Canadian Studies Center/Arctic and International Relations, Henry M. Jackson School of International Studies, University of Washington and the Center for Canadian-American Studies, Western Washington University); the **Center for Global Studies**, Henry M. Jackson School of International Studies, University of Washington, the **Henry M. Jackson School of International Studies**, University of Washington; the **Native American and Indigenous Studies Center**, University of Washington; and the **Consulate General of Canada in Seattle**.

This event is made possible, in part, by Title VI grant funding administered by the International and Foreign Language Education office in the Office of Post-secondary Education, U.S. Department of Education.