

ᐃᑦᑦᑦᑦᑦ ᐅᑦᑦᑦᑦ

A Guide to Teaching in Nunavut

Peter Allan ᑦᑦᑦ McKitrick

A Portfolio Submitted in Partial Fulfillment of the Requirements for the Degree of
Master of Education

Lakehead University

September, 2021

Advisor:

Dr. Paul Berger

Faculty of Education

Lakehead

ABSTRACT

What you can expect from this portfolio is a personal introduction, a brief summary on the near absolute lack of Nunavut teaching guides, followed by a Nunavut teaching guide. More accurately, I'll be providing a cultural guide with tools and notions that may help new teachers in Nunavut. This guide was put together from personal experiences and much reading.

Keywords: Inuit, Education, History, Culture, Nunavut, Canada

ACKNOWLEDGEMENTS

My dad has this principle where we have to finish every project we start. That way, we learn to be conscious and thoughtful with what projects we start.

My mom taught me many useful things that gave me the confidence to finish projects and therefore start them.

I would like to thank Uncle Jake, Uncle Jackie, Uncle Leonard, Uncle Patterk, Aunty Dorothy, my Umaavik (who is my Uncle Amauyak), Uncle Jason, Uncle Joe, Aunt Nellie and my mom's big sister Ayowna. And their spouses, Emma, Sarah, Diane, Mona, Jimmy, Saimanaaq, Tracy, and Lucy.

I'd like to thank everyone in the Math Department at Lakehead, but especially Dr. Greg Lee, Dr. Deli Li, Dr. Razvan Anisca, and Dr. Andrew J. Dean.

At the Education department, I'd like to thank Dr. Angela Van Barneveld, Dr. Joan Chambers, Dr. Jay Kennedy and Doug Jones. And then thanks to Gisella Scalse and the Education Library staff.

Dr. Ann Kajander deserves an acknowledgement but would probably appreciate it if I left out why.

I have a lot of good friends to thank. They know who they are.

And of course, thanks Paul.

Chapter 1: Introduction

Once upon a time, the pre-Inuit civilizations, the Dorsets and the Thule, lived a life of abundance in what would become the Canadian Arctic Archipelago. First came the Little Ice Age of 1650-1850, breaking up the Thule settlements into smaller, mobile Inuit groups who grew strong to survive a life of extreme conditions. Next came contact with the European fishers. Trade with Europeans began to alleviate much uncertainty that came with the harsh environment. Afterward the European colonists came with a certain and well documented goal of extinguishing cultures indigenous to North America and replacing them with their own. Coexistence was unthinkable for Europeans due to arrogance and the belief that their way was simply better.

The Inuit in the north had no formal system of education. Instead, the knowledge necessary to survive the Arctic was passed on intergenerationally through lived and practical experience. The young were taught by the old. The North was home to a wide variety of ingenious technologies and insights into many environmental, ecological, and I would argue, psychological, phenomena. But they didn't have advanced mathematics, they didn't have writing, they didn't have metallurgy, they didn't have formal chemistry, and they didn't have a robust description of physics. Such things would have been surely discovered in time, had they been at all necessary. These are the beneficial things that modern education has brought to the north. However, the Europeans failed to recognize what technologies and insights the Inuit did have to offer and so thought that our cultures in the north were inferior and had nothing to offer and should be replaced. That was the basis of early education in the

North, to civilize the savages and bring them the economic prosperity that the European cultures have cultivated.

How is that working out for them? The North American continent is literally on fire; the air, the land and the waters are polluted and getting worse; the people are depressed, fanatic and economically desperate while the neo-kings of the land buy legislation to reduce their tax burdens, secure their businesses through anti-competitive regulation, and go to space off of everyone's hard work. As Eurocentric superiority continues to be demonstrably false, they come begging to the Indigenous of this land to restore natural balance and harmony to the climate.

My story begins in the 3rd grade when I was sent to the principal's office at my school in Coral Harbour, Nunavut which is on Southampton Island. In Inuktitut, the island is called *Salliq*, and so the town is also called *Salliq* in Inuktitut. However, I had heard that the town had at one point been called *Qallunaarmiut*, because it was where the white people lived. Inuit were not allowed to live there at the time, and it was never called that by the *qallunaat* who lived there when it was segregated. So, when the Inuit were herded into the town by the colonial governments, the town was named Coral Harbour, because of a certain quirk of geography. The land itself used to be covered in a sheet of glacial ice, which would press down on the land. With the ice gone, the land itself is rising out of the sea. Miles inland, you can find ancient shores and seabeds where fossilized coral can be found. But of course, the town needed an Inuktitut name as well. So it goes that the people who live on the island *Salliq* are called *Sallirmiut* and we've been called that since before we lived in the town. We're

still *Sallirmiut* as we still live on the island. But now we also live in the town, and so the town itself must be called *Salliq* so we could continue to be *Sallirmiut*.

Anyways, back to the principal's office in 3rd grade around 2003. I rather do not remember what I had been doing in the principal's office, but it would seem that something was going on because he had asked his secretary if she knew how to spell the word "chaos" as he was writing an email and needed to adequately describe the goings on. I spoke up to let him know how it was spelled. I thought I was being so helpful.

It wasn't until much later in life that I could appreciate the layers of intrigue in the situation. The principal called up my dad, who was the science teacher at the school, and let him know that they could do nothing for me at the school and that maybe I should be taken south to receive a proper education. They were not equipped to teach gifted children.

And so, in 2004, I attended Corpus Christi elementary school in Thunder Bay, Ontario. While my mom is from Coral Harbour, my dad is from Thunder Bay, and I have my grandparents and my uncle's family living there as well. Let me tell you that I did not appreciate the new rules that came with coming to a southern school. I was an Inuk who was used to calling his teacher by their first name and getting up from my desk when I had no work to do to stretch my legs. My 4th grade teacher Ms. Love did not appreciate my northern attitude and the difference in how northern children regard authority, rules, and personal property. Teacher or no, she was a bully that did not earn my respect then and shall not have it now.

I did grades 5 and 6 back in the north at Sakku School for probably financial reasons (I'm not really sure, I was like 9 years old). My dad had done his Master of Education at Lakehead in Thunder Bay through some program and owed at least two years of teaching in the north afterward. In 2007, the situation became that we could go south again and so we did. I did grades 7 and 8 at Bishop E.Q. Jennings Middle School in Thunder Bay. I then went on to grades 9 through 12 at St. Ignatius High School in Thunder Bay.

I did well in school. I did really well. I took Advance Placement classes in Math, Chemistry, and Physics. I took French up to grade 10 and would have liked to take it in Grade 11 and 12, however I was forced to take religion instead as it was a Catholic high school and they wanted to make sure I had a good religious education. I learned all about how the Catholics brought Jesus to us heathen Indigenous children and banished our evil traditional ways. I had been a Christian before my religious education, but I am definitely not a Christian now that I've learned the whole story.

Altogether, it was a good that I went south. I had earned an entrance scholarship to Lakehead University worth the full tuition amount and maintained it through to my second year of university. I was also a successful wrestler in high school, earning a silver medal at OFFSAA and a Bronze metal at Juvenile Nationals. I say this with some pride as my hometown also produced some nationally competitive wrestlers who were my inspiration for pursuing the sport.

Nevertheless, it was a hard transition being away from the north and having to learn an entire new set of social skills. It was hard on the whole family as we were

isolated from our relatives. As well, Thunder Bay is not a friendly city for Indigenous people. My mom could not go shopping alone without the possibility of being harassed by security, police, or just simply not served by some prejudiced proprietors. Still though, Thunder Bay has a good Indigenous community in the Anishinaabe Aski Nation along with an established Indigenous Student Services Centre at Lakehead University. Being a white-passing Inuk saved me from the brunt of discrimination, but there are definitely cliques and clubs, certain in-groups within the city that look down on mixed raced families. During this time, my family would return to the north as much as we could, often during the summer.

I did two years of an Honours Bachelor of Science degree with a major in chemistry. Here I discovered the Boltzmann distributions of statistical mechanics which had me switching over to mathematics. There I took an immediate liking to abstract algebra, the rigorous structures of mathematical proofs and further, I loved teaching others. My motto for learning was simply that the best way to be sure you understand something is when you're able to teach it to someone else.

Near the end of that degree is when the cultural soul wound came to haunt me. My mother is a residential school survivor, and I would rather not discuss her story here. However, intergenerational trauma is part of my story, and I can't continue without addressing this part of my life. Part of my reasoning to apply for the Master of Education program was to explore why it was that I had to leave my hometown to come south. It was that I wanted to learn my own cultural history and help develop

education in the north so that gifted Inuit children no longer have to leave their homes for a chance at higher education.

Chapter 2: Literature Review

Answering the questions: “What do we teach the Inuit children?” and “How do we teach the Inuit children?” are the focus of this literature review. The fundamental problem is that there is very little foundational wisdom to start with. The Inuit are just about 3rd or 4th generation school goers (depending on how short the generations have been) and the first couple generations had an explicitly bad time. Historically, the goal of education in the north has been assimilative and I don’t feel the need to go over those particular events (please see Truth and Reconciliation Commission of Canada, 2016 for further information).

It was initially my naïve understanding that the goal of assimilation has been largely abandoned by the government. However, this is unsettlingly not the case, and the many indigenous cultures of the land are still subject to an immense amount of assimilative pressure.

Horrifying implications aside, this is not a great environment for the development and success of an explicit guide to Nunavut education, especially if we include the caveats that it must respect and promote Inuit culture. Nonetheless, there are some documents we can take a look at.

Teacher’s Guides

I was made aware of this first guide by my supervisor Paul Berger. It is the brief introduction he received in 1997 when he went up north to teach. I imagine the version he received would have been the 1989 version. I could only track down the

2006 revision. *The Inuit Way* produced by Pauktuutit Inuit Women of Canada (2006) is fairly accurate in many of their descriptions of modern and traditional Inuit culture.

There is only a brief section on Education. My judgement of it is that it is so short that I can just reproduce it here for you to judge yourself. Here you go:

Education

Traditionally, Inuit children learned by carefully observing and following the examples set by their elders. An older person would spend time with a young person of the same gender and show them by example how to master various skills. As soon as the child gained a basic skill, his 'teacher' would encourage him to innovate and try to make things on his own. There was no particular time set aside for this education to take place. Teaching occurred when it was convenient and lasted as long as the child's interest held or until other business demanded the attention of the adult. The focus of Inuit education was learning by individual effort and observation rather than by instruction. Inuit children continue to learn all traditional skills by the attentive observation of an older, more experienced person. Nowadays, there are so many distractions for young people in modern communities that there is concern among adult Inuit that younger people are not learning enough about their traditional Inuit ways.

Attendance in modern schools is mandatory for all Inuit children. In the past these schools used a very structured curriculum transplanted from the south. Problems arose from this system, however. The values taught by the schools were found to conflict with traditional values the children learned at home. For example, Inuit children are taught at home to be non-competitive and not to ask people direct questions. The modern school system however, emphasized competition and encouraged children to question their teachers and each other. As well, there was a time when Inuit children were punished for speaking their own language at school. While this no longer occurs, many Inuit have expressed the need to have more influence on what is taught to their children and how this material is taught. They feel more emphasis should be placed upon Inuit culture and language throughout the educational system from day care to post-secondary institutions. Over the past decade, there have been substantial changes in the education system. Increasing numbers of Inuit are now becoming teachers and the curricula have largely been adapted to better reflect Inuit culture, language and values. (p. 19)

Basically, it says education used to be done one way, and now we're doing it another way that doesn't really work but it's getting better maybe. The rest of the guide is a good read on modern and traditional Inuit culture. The thing to note about it is that the voice is an outside one often referring to the Inuit as "they" rather than "we", despite being produced by an Inuit organization. It begins with a noticeably wrong version of the Legend of Sedna (Elders maintain that Sedna did not refuse to marry and that the girl who refused to marry is its own separate story (McDermott, 2015). Other than that, much of the information is fairly accurate and up to date. I have not looked at the 1989 version.

I looked for more guides by searching "Inuit Education" in my University's Library database. There I found the Inuit Tapiriit Kanatami's national strategy on Inuit education (2011), which is not an orientating guide. Using the search term "Inuit Teacher Guide" does not return anything particularly relevant or useful. Searching "Inuit Teacher Orientation" will find Paul Berger and Juanita Epp's (2007) article titled *"There's No Book and There's No Guide": The Expressed Needs of Qallunaat Educators in Nunavut*. The title alone is a very telling result.

Going in depth on the aforementioned article, the findings are from a collection of interviews conducted with *Qallunaat* educators (Berger & Epp, 2007). The authors express a need for curriculum resources that would be relevant to the region, as the current curriculum was ripped straight from the curricula of southern provinces, such as Alberta, Ontario and Quebec. A course on the geography and history of the

north, rather than that of the French revolution, would have made for a much easier time maintaining the interest of Inuit students.

The other problem expressed is the difficulty of teaching courses as if English were the first language. The reality of the common language of the north these days is rather complicated, as children do not necessarily speak perfect English, nor do they speak perfect Inuktitut. Rather, many individuals speak a mix of both languages, switching between them as needed. There's also a difficult to describe problem with language resources for teaching English in that they often take things like trees to be an everyday occurrence for children. On the flip side, there is an absolute lack of Inuktitut language resources, as the language itself did not have a writing system, let alone a formal system of education for many generations. The last major complaint from Berger's article is the lack of adequate introduction to Inuit culture and worldview. I will address this last point in Chapter 4.

The Government of Nunavut has a website, where we can find a collection of useful resources under the Department of Education. Under the Educator tab, we can click on Orientation Supports and there you will find two orientation guides: the 23-page *Teachers Key Essentials Guide* (Government of Nunavut, 2020b) and the 39-page *School Leaders Key Essentials Guide* (Government of Nunavut, 2020a). Both Guides are marked as Drafts – May 2020. Neither guide lists an author and I'm not sure if they would even want credit for it. At least they're recent.

National Strategy on Inuit Education

In 2011, ITK put out the National Strategy on Inuit Education. This is a good document and should be required reading for the Northern Teacher. What they have provided is direction where there was none. I believe their focus on Early Childhood Education and the development of Inuit languages and literacy are good starting points. However, I think they focus too much on success according to southern Canadian standards. An excerpt:

Low educational outcomes are associated with adverse social implications, including greater unemployment, greater numbers of youth entering the criminal justice system and greater incidences of illness and poverty. Existing socio-economic conditions will worsen unless more Inuit children graduate from high school with opportunities to succeed in post-secondary education. (National Committee on Inuit Education & Inuit Tapiriit Kanatami, 2011)

There's too much focus on European-Canadian academic and economic success over measures of Inuit success like community health. These sorts of expectations are insidiously assimilative.

The statistics correlating low educational outcomes to higher crime rates, illness, and poverty entirely neglect the characteristic differences in demographics and social structures that exist in Inuit Nunangat. Often, the successful and reliable hunter abandoned formal education around the 7th grade. The caregiver for both the children and the elderly often makes very little money. High school graduates, and especially post-secondary graduates, find themselves with skills more suited to a southern Canadian economic system and so they often leave their home communities for work elsewhere. Something needs to change about the Arctic high school experience to

make graduation useful and desirable within the community and not simply a prerequisite to move away from home.

The other major complaint I have about their work is that they are being sneaky about establishing a Romanized standard writing system. Section 3.8 on Establishing a Standardized Writing System presents the fact that there are currently two systems. They do not openly commit to a Romanized system, but when they speak of a standardized writing system, they are referring to a Roman one. I believe the syllabic system is ultimately easier to learn, easier to read, it is more aesthetically pleasing, as well as distinctive. Being distinctive and recognizable is an important part of developing a strong and resilient cultural identity. I argue that the only advantage of a Roman system is that “everyone” already knows how to write and type in Roman characters. However, this is undercut by the fact that the English language keyboard is poorly set up to accommodate Inuktitut letter frequencies. For example, q is way more common in Inuktitut, and they don’t have a good analogue for sounds such as ϵ .

The ITK are ultimately based in Ottawa. Too much of their decision making comes from a southern Inuit perspective; the perspective of an Inuk who has left *Inuit Nunangat* and lives within mainstream Canadian society. While they are undeniably Inuit, the Nunavut Land Claims Agreement defines Inuit and Inuit beneficiaries by use of land; blood purity is a southern concept and the ITK should think about their perspective and lifestyles as southerners before being too presumptive when speaking for the needs of Inuit in the north.

So, teachers in the north can find bits and pieces here and there, some of it is good. My work creates an accessible guide, written by a northerner, that should help Nunavut teachers to know where they're teaching and be better prepared to work to change schooling.

Chapter 3: The Guide to the Guide

I have been influenced by Douglas Adams' (1997) *The Hitchhiker's Guide to the Galaxy*. In the beginning of the work, Doug includes a section, also titled *The Guide to the Guide*. In it, he describes the adaptation history of his story, as it transitioned from a manuscript to a radio show, to the book, and then a movie. Quite a lot can be understood about communication and storytelling as the poor storytellers are forced into the system of producing commercial products so they may eat.

Anyways, this guide was put together mainly from my own experiences growing up in the small Inuit community of Coral Harbour, Nunavut. I grew up listening to my many aunts and uncles teach traditional skills, concepts, ways of thinking, and history. As well, I grew up learning when to speak, how to speak, and what happens if you speak poorly. You learn these things by speaking poorly. The process thereafter was to scour available resources for something I could reference because it's hard to build an argument out of something a relative had said sometime so long ago that I can't say when I heard it or even which relative had said it and then have that argument taken seriously.

Parts of this guide were found here and there. One useful image about the traditional names for the Arctic seasons I had found on the wall of someone's home. They had small children and so they had a collection of educational resources taped to their wall. They also had a set of Inuktitut names given to the common months of the year and days of the week that the *qallunaat* like to pretend are universal. Other parts were found by happenstance while browsing the internet, such as the Kaktovik

numerals developed by school children in Alaska, along with a lot of little tidbits such as the whole thing where Western Music Theory is explicitly founded on white supremacist ideals (Neely, 2020).

By some chance, I happened to be playing a tabletop role playing game at a used bookstore where Peter Freuchen's *Book of the Eskimos* (1962) was nicely sitting on the shelf behind us. For \$19.95 + tax, the book came home with me. Freuchen was a Danish Arctic explorer who had spent over 70 years, beginning in 1906, travelling to many different places in the north. There were not many viable lifestyle choices in the Arctic back then and so he lived very much like the northerners did. While it would have been preferable to sit down and speak to the denizens of the north from this time, the advantage of Freuchen's story is that it was able to sit on a bookstore shelf in Thunder Bay where I happened to be playing a game with friends in 2019. Still though, much of the book is first or second-hand experiences to do with the daily struggle of survival. His experiences in the north span many decades and Freuchen was able to comment on the change in lifestyle and security over that timespan. It is still a *qallunaaq's* story and so much nuance is lost to the western perspective, but it is very nearly the only surviving candid written record of that time.

Another book I happened upon by chance was Peter Freuchen Ittinuar's *Teach an Eskimo How to Read: Conversations with Peter Ittinuar* (2008). My mom had a copy in her pile of things because we are somewhat related to Ittinuar through the side of the family that does not connect us to his grandfather, Peter Freuchen. The north is a small place, people-wise. It's rather large otherwise. Ittinuar was one of the lucky

Experimental Eskimos, which was an honest-to-God government experiment where they took five intellectually gifted Inuit children from their loving homes and raised them with white families in Ottawa to see if they could become civilized and perform to the same standards as their fellow white children. Too bad they weren't in the business of giving him superpowers. The book covers a fair deal of the injustices committed against the Inuit and then further goes into Ittinuar's experience as the first Inuk on Parliament Hill.

As it turns out, Ittinuar's book comes from a series on the *Life Stories of Northern Leaders*, published by the Nunavut Arctic College. I had trouble finding these books for sale and so I contacted the NAC who sent me a copy of each book in the series except for John Amagoalik's *Changing the Face of Canada* (2016). I was about halfway through the first book, Abraham Okpik's *We Call It Survival* (2005), when my supervisor suggested that I knew enough about the north from my own experiences and had to get a move on writing this portfolio.

Still though, other books I've drawn on are Margaret Kovach's *Indigenous Methodologies* (2009), McPherson and Rabb's *Indian from the Inside* (2014) and Thomas King's *The Inconvenient Indian* (2013). When I get this silly portfolio written, I have another pile of books to consume, which includes Hugh Brody's *The People's Land* (1991) and *The Other Side of Eden* (2002) by the same author. I will also continue with the *Life Stories of Northern Leaders* Series. And then maybe I can take up reading fiction again.

I would very much recommend reading great works of fiction to hone your interpretive communication skills. Authors such as the aforementioned Douglas Adams, as well as authors such as Terry Pratchett, Neil Gaiman and Patrick Rothfuss are such delightfully clever modern wordsmiths and storytellers. I also read most of the popular works of young adult fiction, as it's important to keep track of the literary zeitgeist. In order to improve writing skill, the most beneficial practice is to write often. Beyond that, it's also quite beneficial to read a large volume of terrible amateur literature such as fanfiction. It's hard to replicate and emulate the work of a master, but it's quite easy to observe and learn from the mistakes of the fool.

So yes, as far as methodology is concerned here are the steps to creating your very own Teacher's Guide to the North:

Step 1: Live in the north. Pay attention to this bit.

Step 2: Read a lot of books. Movies, manga, and TV shows also work as a supplement, but books are a definite prerequisite because you want to be writing.

Step 3: Go to school, any one of them will do. Most of them are in the south.

Step 4: Get good at writing somehow. This part is tricky, and people will find a lot of ways to say your writing is bad. Pre-emptively call these out in Step 4.

Step 5: Write the guide.

Chapter 4: ᐃᑕᑦᑭᑦᑭᑦ ᐱᑕᑕᑦᑭᑦ - A Guide to Teaching in Nunavut

So you're going to be a teacher in Nunavut, or perhaps you already are. The Canadian Arctic is a place that necessitates a different lifestyle than what one might consider the 'mainstream' European-Canadian lifestyle. However, this obvious fact was not perceived by the colonial government when they wanted to establish a reasonable claim to the region. While I wouldn't recommend playing fair against systems of oppression, the silly colonial governments were trying to run half a continent's worth of societies by having the rich English Canadians argue with the rich French Canadians in Ottawa and writing such arguments down, sometimes having to ask for permission from a lady across the silly Atlantic Ocean for permission to enact the results of their arguments. And it's through this system of governance that the Inuit people were herded from the land into settlements and taught the Canadian way of life at the expense of the traditional life which was deemed inferior by arguing *qallunaat* in a faraway land.

Later on, the Canadian government realized that the assimilation of a people constitutes genocide and in true Canadian fashion, they've apologized. Since then, there has been progress toward self-determined governance of Inuit society. However, the Inuit are still in towns, and they still must go to schools that appear to be designed to serve the middle management needs of mid-1900's American industries.

Anyways, that's the mess we're in. Through this paper, I hope to give Nunavut teachers some of the tools they need to challenge and negotiate the system in its current form to better serve the needs of the modern Inuit. To do this, we're going to

begin with some decolonization framework inspired by Margret Kovach's *Indigenous Methodologies* (2009) as well as terminology and useful abstract structures from Shannon and Weaver's *The Mathematical Theory of Communication* (1998). We will paint a picture of the current state of northern reality to hopefully identify the skills and qualities to promote healthy northern lifestyles and industries.

Wonderful. I am a half-Inuk from Coral Harbour, Nunavut doing a Master of Education degree at Lakehead University. The story goes that I was "academically gifted" and that the schools in my home community would not provide me with the opportunities that a southern school would. And so, at the age of 12, my family went south so my brother and I could attend middle and high school in Thunder Bay. They were ultimately correct about the opportunities. The south offered consistent teachers and advanced placement math and science courses as well as developed athletic programs such as wrestling for me and hockey for my brother. My brother and I are white-passing and while we did not experience racism like our mother and sister, the vast difference in social culture still presented many challenges. Up north, we were half-*qallunaaq*. Down south, we're half-white.

Colonialism and Decolonization

The Inuit people are a people deeply affected by white supremacist policies. This is an introductory fact of modern Inuit culture. The institution of formal education in the north is so far removed from the traditional 'norm' that it is a common and prudent question to ask what it is we're doing having schools in the north at all. There

is not really a clean answer, but at the surface, while the Inuit did not appreciate the attempted assimilation by the Canadian government, it's well documented that the Inuit did and do want the comforts and benefits of modern civilization, though with the caveat that we remain culturally independent. The reality of the situation is that we're in towns, and if we're doing towns, I guess we're doing schools.

Given that this is still a rather contentious issue, we're going to proceed with the assumption that formal education organized by the government is the way to go. The question becomes, how should we do schools? The literature gives a clear and useless answer. We should not do schools how they do it in the south. From the early days of Arctic education, it seemed that many teachers that taught and lived up north quickly realized how obviously unsuitable southern education was for life in the north and advocated for systemic changes that were culturally adaptive (Hinds, 1958). These things were almost universally unsupported by the men arguing from seats in Ottawa (Brody, 1991, p. 211).

The Canadian government decided it was imperative to steal everyone's children and hold them hostage in residential schools, where outbreaks of tuberculosis were frequent, many children were abused, and the use of Inuktitut language or expressions of Inuit culture were cruelly punished (Netser, 2013). Because the children were being taken, the Inuit moved to the settlements around these schools to be with their children. Once they moved to the settlements, the RCMP enacted a mass culling of sled dogs, increasing the reliance on settlements and wage economy and ultimately resulting in the end of the nomadic lifestyle (Ittinuar, 2008). The government had a

hard time keeping track of ‘their Eskimos’ so they enacted the ‘elegant’ solution of issuing everyone a leather dog tag with their Eskimo Number (Okpik, 2005). It’s this particular indignity that had the word Eskimo fall out of common use to describe circumpolar peoples. As well, there were the High Arctic Relocations and the Experimental Eskimos that rounds out the list of major colonial atrocities committed by the Canadian government against the Inuit within the past century (Ittinuar, 2008; Tester & Kulchyski, 1994). The land seemed to mitigate the amount of abuse experienced by the Inuit, but only in comparison to the treatment of other Indigenous peoples subjected to the similar policies.

It will come up a lot. This sort of thing is hard to talk about because there are no good answers and not a lot of good news. As I’ve grown up, I’ve begun to recognize exactly how much southern culture has influenced the north. Self-government, settlement, health care and technology. These are the good things. Trauma and loss of traditions are the bad things. Education is a mixed bag. I imagine that every Inuk eventually comes to know about their history, and everyone goes through their own set of emotions. There’s grief for what could have been and grief for those that we’ve lost. There are still many today affected and struggling, often with anger. But hating the *qallunaat* for doing this to us seems like it would be missing the point and missing the lesson to be learned.

As a northern teacher, it is going to be common to have students affected by trauma and grief. I’m hopeful for a future where teachers do not have to prepare to lose students to suicide. But for now, it’s good to promote good mental health and

self care practices. While I can give advice on things that have worked for me personally, I'm hesitant to take on the responsibility associated with giving such advice.

For teachers coming from the south, I would recommend reading about colonial history if you haven't been exposed to such things. If your history of North America begins with Columbus, then you have some reading to do. In any case, many specific challenges of Arctic education stem from colonial history and if you subscribe to "alternative facts" then you should find another career.

Margaret Kovach's *Indigenous Methodologies* (2009) is a wonderful resource highlighting the incompatibility of established western social science methodologies with Indigenous worldviews. Often, the Indigenous research has to modify or wholly develop new practices to work around implicit assumptions that established methodologies take for granted. As a result, I would say that academic Indigenous social science is in a mid-pioneering phase (ignore the terrible colonial reference). However, it's good to recognize that Indigenous philosophical thought and social science has its own long and rich history independent of western standards of legitimacy (McPherson & Rabb, 2014).

When looking through written resources for information on Inuit and Inuit culture, be sure to do a thorough background check on the author and be mindful of how old the resource is. Good resources will have a section describing the background and perspective of the author. Bad resources will ignore this caveat and write from an "objective" perspective that is sometimes anything but. Often the standards of objectivity are chosen specifically to prefer Eurocentric cultural values. As an example,

in western music theory, the intention was explicitly to “prove” the superiority of the western style (Neely, 2020). Western medicine often neglects differences in physiology on non-Eurocentric populations. The list goes on.

Angeletics

From the Greek *angelos* meaning messenger, Angeletics is the study of messages (Capurro, 2011). There’s quite a lot of irony in that the original works describing angels were likely misinterpreted resulting in the common understanding of angels as some mystical winged creature and not some stand in for the way news used to travel by word of mouth. I particularly like the term Angeletics, because my use of the term purposefully misrepresents the field as some study of mystical or divine subject. A more effective name from an Angeletic standpoint would be communications theory or message theory. However, that irony demonstrates the importance of effective communication and I believe it’s important to practice being mindful of and to work around the prejudices that word choices connote. So much of Inuit culture has been translated into English by people who did not have much regard for those traditions. They would often choose words, such as “spirits” and “shamans”, that invites many to dismiss such subjects as primitive malarky. Others tend to see such practices as analogous to western religions, which is an altogether unhelpful way of understanding the survivalistic belief and knowledge-system (Quassa, 2016).

Shannon’s *The Mathematical Theory of Communication* (1998) is a rigorous mathematical description of mechanical information transfer in both continuous and

discrete cases as well as noiseless and noisy scenarios. Much of the structure, terminology, and framework for thinking about communication problems will come from Shannon's work, but I really like the term Angeletics. The term comes from a work by Raphael Capurro (2011), about which I have irrelevant opinions, but I like his fun word, so I have to credit him too. He did cite Shannon's work, which I recommend.

In any case, in this field of study the transfer of information via messages is described as a five-part process. A message is created by a source, encoded into a signal, transmitted via some medium (with or without noise), received and decoded, and then finally interpreted at some destination. In the case of person-to-person speech, we have one brain as a source, the vocal apparatus as an encoder, the air as a medium, the ear mechanisms as a receiver and another human brain as a destination. This abstraction allows us to identify the parts and processes of any communication dynamic, from simple communication scenarios such as a morse code telegraph to say a day or even semester's set of lectures.

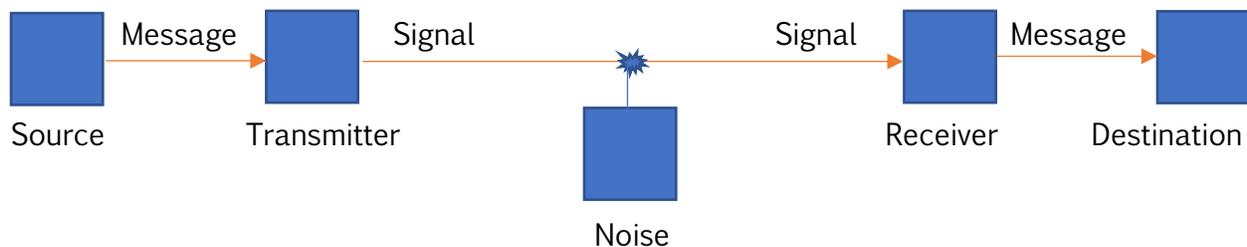


Figure 1: A symbolic noisy communication system from Shannon (1998)

This is useful for recognizing the different media that information can be carried across, and it's useful to reflect on different levels of access to information technology

throughout history. In the modern age, we have access to pre-recorded videos as well as interactable audio visual presentation software to assist teaching. In previous ages, they had the chalkboard, which can work just as well. There was the age where the teachers would trundle along a big tube TV and VCR set up so that movies could be put on. The teacher's lecture as a whole can be understood in its parts as a complex communication exercise, with many messages being transferred between the participants.

Shannon (1998) has an intro by Warren Weaver that describes three levels of communication problems. At one level are the technical problems. Problems at this level deal with message structure and transmission, and so they refer to individual sounds in speech or symbols in the case of written communication. Shannon's theory exclusively (and rather exhaustively) covers problems at this level, showing that results at the technical levels can have implications at the other two, but the reverse is not true.

The second level is the semantic level, and it has to do with the connection between a message and its meaning (Shannon & Weaver, 1998). I mean something by the words I say, independent of the order and frequency of symbols I've used to express that meaning. There is quite a respectably sized infinity consisting of the number of ways that nothing at all can be said for any length of written message. By extending this bit, I can make this paper arbitrarily long and waste everyone's time.

While Shannon (1998) goes into discrete and continuous communications channels, these are concepts relating to the technical problems of communications.

The analogous concepts for semantic problems would be the differences between live and recorded messages. A live message can quickly self-correct any misunderstanding, especially if there is some sort of feedback dynamic. A recorded message is a permanent record, encoding mistakes included. Depending on how old a recorded message is, it can also be subject to semantic decay. As time marches on, fewer and fewer people will be able to appreciate a well-written joke in Latin.

As a northern teacher, we will be mainly focused on the decoding aspect of communication. There is a common arrogance to assume that everyone decodes all messages in the same way. I recognize the vantage of my own perspective as being encased in the blinking of a neural network on the inside of some kind of tax-paying ape, however I tend to struggle with the idea that others are seeing a different set of neurons blinking, but ultimately experience a similar physical reality. Ideas from constructivism indicate that everyone builds their language decoder from their lived experiences, and so constructed perceptions of reality are different from one another. It's often a collection of subtle difference, like seeing a dog and thinking either "dog", or "*qimmiq*" or "chien" or even "Malamute" or "Rover". It's also possible to see the dog and just simply think of the animal by means other than language.

Cultural bypass can occur when different conventions are used between communication participants. As an example, the Inuit and the *qallunaat* have different conventions for negative statements and Boolean logic. By that I mean, if you ask a student a negative question such as "Do you not have a pencil?", the Eurocentric student will answer "No, I don't have a pencil" while the Inuk student will answer "Yes,

I don't have a pencil". An example I can reference to satisfy Eurocentric standards of legitimacy comes from an article where they describe the differences in the American and Japanese understanding of the word "soon". Americans understand "soon" to be immediate, within the hour or the day while the Japanese understand it to mean within one or two weeks (Kameda, 2004).

Often, communicators will make references to common experiences to take advantage of the brevity, style, and specificity of those experiences. However, if your audience does not share those experiences, the reference will sound like it's from way out in left field where I guess they know about baseball. A southern teacher will need to develop a mindful awareness of the things they take for granted, the assumptions about reality that they may not share with their students. The idea is that in a cross-cultural communication dynamic, the teacher cannot assume that their students will decode their messages in the same way that they do. An Inuit teacher will have an easier time relating to a class and recognizing what things their students will have already seen as well as things that may need extra explanation. However, we Inuit teachers often have our blind spots regarding colonial or southern values that we've mistaken for or adopted as Inuit values without acknowledgement. It's even trickier with a mixed culture where students may know about something unexpected but still possibly have a different association.

Really, all of this framework is to say that you should probably not teach the four seasons to Inuit children using pictures of trees. Trees are a magical phenomenon that occur in a faraway land that a child may have seen on TV or maybe they've had

some opportunity to travel and see one. Even then, it's not really an experience related to a change in seasons. Many things that are common to the south will be as exotic to the Inuit child as the zebra should be to the southern Canadian child. Things like city blocks, movie theaters, houses with basements, ice cream trucks, tipping at restaurants, and taxi cabs are magic TV things. It would be good practice to watch for references to these things in curriculum resources and take the time to either modify the example or just actually explain the magic thing from the south like you would explain a giraffe. It takes a bit of practice to become mindful of the things normally taken for granted.

It's rather important to get to know your class for this reason. Maybe they're all about Spiderman. Maybe the interest is hockey. There are going to be little fads where an entire cohort of students takes up some hobby, becoming little experts in their own way. Fad culture is very strong in the north, where there is often nothing else to do but obsess on something for a couple months. Our ancestors would often unexpectedly find lots of time on their hands and so I feel like we have a culturally entrenched sense of patience for practicing and grinding out skills.

At the last level is the effectiveness problem of communication. These are situations where you tell a child "do not do" and the child just goes and does. Similarly, the colonial government wanted assimilated Inuit, and so they developed their schools, one of which being the Churchill Vocational College where some absolute madlad taught civil rights and political science, probably kickstarting the Indigenous

rights and anti-assimilation social movements. I would say effectiveness problems are a beneficial feature of language, rather than a bug.

For a proper Angeletic approach, we need familiarity with the northern lifestyle and history, which will provide a contrast that makes it easier to become mindful of Eurocentric preconceptions. Here we go:

The Land

In other parts of the world, we have places like Finland, Iceland. The Land of Rising Sun. In other languages, there are places like Kazakhstan and Afghanistan where the -stan suffix means land. Up north, it's just the land. Maybe they could have called it the Land of the Midnight Sun. My dad refers to it as the Land that Time Forgot. The name Nunavut would translate to Ourland, with Nuna- meaning land and -vut being a suffix indicating collective possession. *Inuit Nunagnat* is The People's Land But most just call it the land.

The geography of the arctic is something to consider. There are the Hudson's Bay lowlands that refer to the lands along Hudson's Bay. These are large flat expanses that shift between tundra and desert. The glaciers of the past ice age had been pressing down on the land with such immense pressure that now that the ice has melted, the land is rising out of the sea. This is called isostatic rebound and because of this, we can find the remains of traditional camps established on ancient shores that are miles inland today.

Other parts of the north are mountainous and have been worn down by shifting glaciers over thousands of years. This splits Nunavut into its three major regions: the Kivalliq region which is mostly the mainland portion of Nunavut on the west shore of Hudson's Bay and includes Southampton Island. There's the Qikiqtaaluk region, formerly known as the Baffin region and it refers to the communities on the mountainous Baffin Island and includes the high arctic Ellesmere Island. Then there's the Kitikmeot region, that would be the communities along the northwestern islands and coasts of Nunavut. I'm originally from the Kivalliq region and I've only really heard stories about the Baffin mountains, and I know even less about the Kitikmeot region.

Further, there are Inuit people outside of Nunavut as well. These include people from the Nunavik region on the north and west coasts of Quebec, Nunatsiavut in north Labrador and the contentious NunatuKavut land claims region in south Labrador. The northern shore of the Northwest Territories is the Inuvialuit Settlement Region, though NWT as a whole is shared between different Indigenous groups. The Yukon has a bit of northern coast, though I get less familiar with the cultural identities of the people the further west we go. Outside of Canada, there are the Greenlanders, who have three separate groups of Inuit: the Kalaallit of West Greenland, the Tunumiit of East Greenland and the Inughuit or polar Inuit of North Greenland. There are Inuit in Alaska, though they might call themselves something else. I hear there are people calling themselves *Iñupiaq*, which really sounds similar to *Inuttiaq*, which in my dialect would be "True Inuit" or "Good Inuit" and I want to believe that there's someone out there feeling really clever about that one.

There are non-Inuit Eskimos such as the Yupik people who are very much upset that they have been replacing the term Eskimo with Inuit. Siberia has the Chukchi people who are Russian Yupik but have since been separated from the American Yupik across the Bearing Strait when that land was bought. The Aleut in the Aleutian islands are a non-Eskimo people, but that are within the language family. Last, I want to mention the Saami peoples of Scandinavia as a related circumpolar people. I can also mention the Ainu of north Japan, who I think may be distantly related to the Inuit, based on the few things I personally have heard about them, though that is my own speculation. We also share some cultural and physical characteristics with the Mongolians on the Asian steppe lands, though at this point we are distinct peoples.

The north has five or six traditional seasons to it, depending on how far north you go. As stated previously, the four seasons model doesn't make sense in a land where there are no leaves to fall. Up north, the seasons are based around whether there is snow on the ground or ice in the sea. Rather than attempting the thousand words, I believe a graphic will best explain the situation:

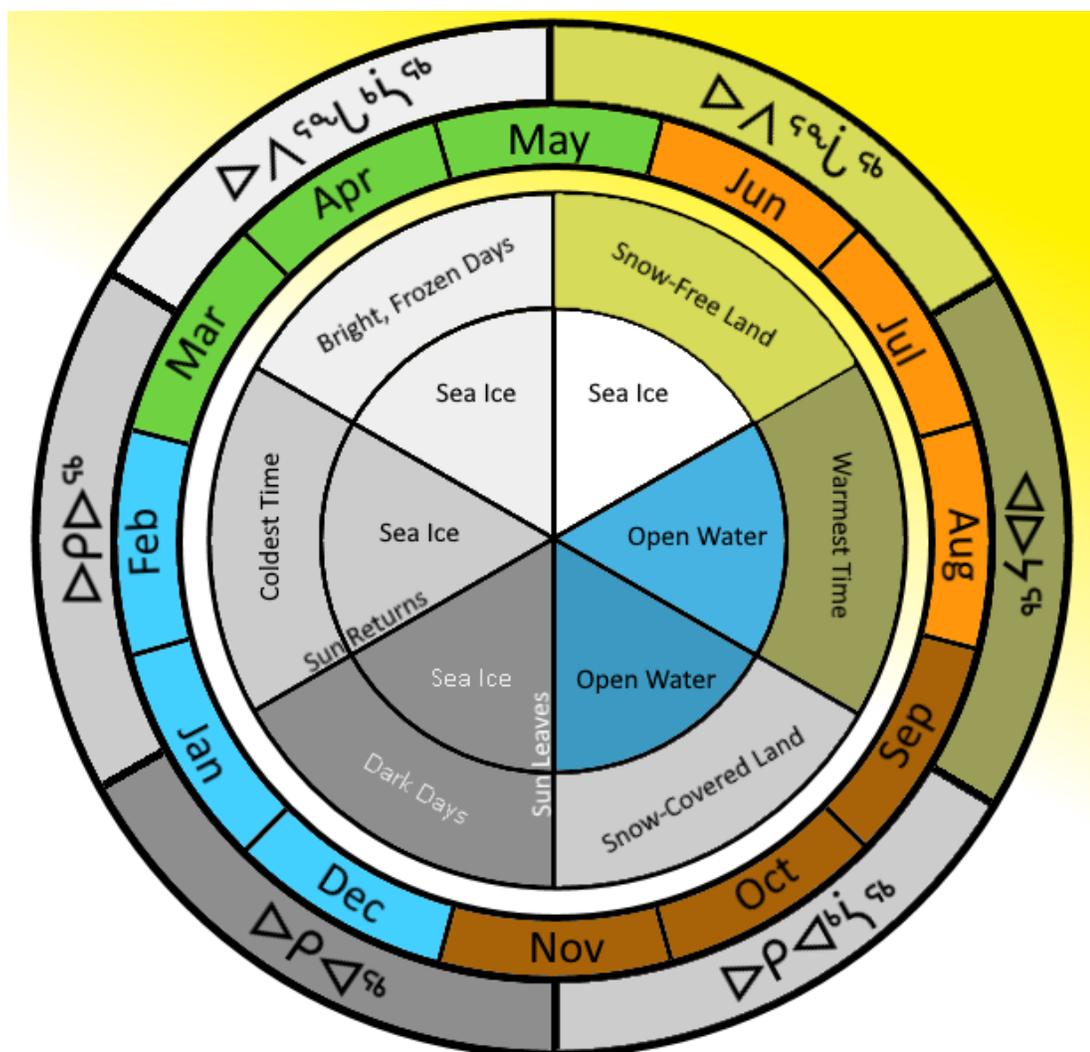


Figure 2: Arctic seasons in Inuktitut syllabics, overlain on the Western seasons

The seasons, beginning in spring, are *upirngakksaaq*, *upirngaaq*, *aujaq*, *ukiakksaaq*, *ukiaq*, and *ukiuq*. Often, they're translated as early spring, spring, summer, fall, and the last two are winter. The difference between *ukiaq* and *ukiuq* is whether there is 24hr darkness. My hometown is not far enough north to experience such a season and so we have a five seasons model. We've been on southern calendars a while and the four-seasons model does roughly fit over what we experience and is convenient for

participation with the rest of Canada and the world. However, I rather think the traditional system should also be taught. On that note, I would like to point out that this graphic is not perfect and only has rough approximations for when the seasons actually change. I would recommend observing and marking those yourself and talking to community elders to see when they say the seasons change. As well, these particular names may be specific to my hometown, with the exception of *ukiaq* (ᐃᑭᐱᑦ), which we don't experience.

Language

The original foreign educators of the Inuit were the church missions that came to bring the word of God and to banish the evil spirits and the shamans who conjured them. At least they taught in Inuktitut and even developed a system of writing so that we may read the New Testament in Inuktitut. This was a very unfortunate trade-off, where the Inuit gain the ability to keep written records, but it resulted in the widespread adoption of Christianity and the decline in shamanism and native spiritual beliefs and practice (Quassa, 2016).

The Inuktitut syllabic writing system was developed by some church that adapted the Cree syllabary. Supposedly, the Cree syllabary was the work of collaboration between the Methodist James Evans and his Ojibwe and Cree friends that whitewashed history has forgotten. And I do mean friends; by and large, Evans was an advocate against encroachments on the Indigenous industries, though he was still very much about that Jesus fellow (Murdoch, 1981). However, the origins of the syllabary

while before your ears learn to pick up on these sounds. These are sounds represented by q, r, ng and &, Often a t is used in place of the &, but that's an annoying symbol to hunt down on a standard keyboard. I would say &i is best phonetically approximated by thli. The syllabics for these sounds are ᑭᐅ = qi, ᑭᑭ = ri, ᑭᑭᑭ = ngi, and ᑭᑭᑭᑭ = &i. That these symbols half-sized characters, and that ᑭᑭᑭᑭ looks like ᑭᑭ = li, indicates to me that these were developed later than the rest of the set, probably with more Inuit involvement. Other than that, the j often makes a y sound, we experience v/b blending where these sounds are used interchangeably, and then specific dialects may have different conventions.

Sometimes they also just straight up use H. I'm not as familiar with the use of the ᑭᑭᑭᑭ (nnga) set and I usually don't include it. My keyboard has it, but it doesn't have an associated nng final. If we ignore that set and the set of finals, the syllabary can be sung to an extension of the tune of "One little, two little, three little Indians". There's not another children's song fast enough to get through the symbols in a reasonable amount of time, so we're just going to have to bear how uncomfortable it makes the *qallunaat*.

Δ i	▷ u	◁ a	
Λ pi	> pu	< pa	◁ p
∩ ti	∩ tu	∩ ta	◌ t
ρ ki	∩ ku	b ka	◌ k
∩ gi	∩ gu	∩ ga	◌ g
∩ mi	∩ mu	L ma	◌ m
σ ni	∩ nu	∩ na	◌ n
∩ si	∩ su	∩ sa	◌ s
∩ li	∩ lu	∩ la	◌ l
∩ ji	∩ ju	∩ ja	◌ j
Δ vi	∩ vu	∩ va	◌ v
∩ ri	∩ ru	∩ ra	◌ r
∩ qi	∩ qu	∩ qa	◌ q
∩ ngi	∩ ngu	∩ nga	◌ ng
∩ nngi	∩ nngu	∩ nnga	
∩ &i	∩ &u	∩ &a	◌ &

Table 1: Inuktitut syllabics and their Roman orthography

When the government took a crack at civilizing the north, they insisted on English language instruction. While the churches' intentions were to protect everyone from alleged eternal damnation, the colonial government was hellbent on assimilation. They really thought that being white was the way to be, culturally as well as

genetically. Children were taught this. In many cases, children were beaten for speaking Inuktitut and for expressing Inuit culture (Netser, 2013). This practice was eventually recognized as barbaric and equivalent to genocide by cultural assimilation (Truth and Reconciliation Commission of Canada, 2016).

The end result was a generation of Inuit that feel shame toward their own culture. This generation grew up and taught their children English, rarely spoke Inuktitut at home and thought that it was better this way for their children's future. In the present day, Inuit in their 20's are likely to have monolingual grandparents speaking Inuktitut, bilingual English and Inuktitut speaking parents, and mostly English-speaking monolingual peers. As well, the bilingual generation feels they speak poor Inuktitut in comparison to the Elders they remember, and while my peers would have a passing familiarity with many words, we can often lack the confidence to express ourselves solely in Inuktitut. My generation has had the next set of kids, and they're growing up with iPads and Euro-American mass media teaching them English, but I also feel that the world at their fingertips makes them appreciate where and who they are a little more than my generation did.

However, we don't speak perfect English either. Naung, we often speak a mix of both languages, taking nouns and grammar from either language. Part of this is due to necessity as the north has a lot of common occurrences where there is not an easy English word. The *sinaa* is the floe edge, where the ice meets the open water. Where the sea ice meets the shore, there's activity similar to tectonic plates where the sheets of ice push up against the shore and make little miniature ice mountains called

manilaaqs (mixed language; the proper plural is *manilaat*). The animals are commonly referred to by their Inuktitut names, even when otherwise speaking English. In Inuktitut, adjectives are added onto words as suffixes; toy things can have the suffix *-nguaq* added to them; a toy guitar would be a *guitarnguaq*. Other suffixes of note are *-laaq* (small), *-juaq* (big), *-kulu* (cute/precious), *-raalu* (bad). Further, Inuktitut has this structure where often an introductory word is given before the meat of the statement. Words like *alianait* (relief), *juaa* (frustration), *tagualu* (look at this, but with a bit of frustration), *taa* (the speaker has recognized an inconvenient misunderstanding or mistake).

We speak an improper mixed English and there ain't nada no one can do about nothin'. We have good reason to disregard and even rebel against established propriety. We live in a place that has many things without English words and assimilation has brought us many things without Inuktitut words. For now, we're a mixed language people. Often, we think in both languages and have to translate our thoughts for monolingual audiences.

Mixed language interactions are necessarily informal. There are rather awkward grammatical differences between English and Inuktitut that cause problems. Inuktitut has a plural and a dual form; we can have one Inuk, two Inui, or three or more Inuit. This is especially egregious when discussing Inuktitut loan words in English, such as kayak and igloo, which would be *qajaq* and *iglu* in Romanized Inuktitut. In English, we would have two kayaks, but this can sound weird to an Inuktitut speaker. We would rather have two *qajai*, or three or more *qajait*. Same with *iglu*, *iglui* and *igluit*, rather than the

English igloo and igloos. The other weird interaction is with possessives. In English, the possessive marker is 's and it goes on the subject. In Inuktitut, the possessive marker is a subject dependent suffix that goes on the object, alongside a reference suffix added to the subject. If Mark is *Maakusi* and *pana* is snow knife (for building *igluit*), “Mark’s knife” becomes “*Maakusiup pananga*” (bold emphasis is the possessive suffix). Where *ataata* is father, “my father’s knife” would be “*ataatama pananga*”. In the mixed language case, we often default to the simpler English possessive. My *ataata’s pana*.

And then finally, there’s the awkward situation that is the difference in definition between the Inuktitut word *Inuk* meaning human, and the English word Inuk referring to the loose group of circumpolar peoples that live in Nunavut, Greenland, parts of Quebec, Labrador and all that. Are we a race? An ethnicity? These are all foreign concepts to us. In Inuktitut we would refer to all humans as *Inuit* but then we refer to the white southerners as *qallunaat*, which is by no means a kind term, especially with the dehumanizing context. The best solution within Inuktitut is to use the suffix *-miut*, which when attached to the name of a place, refers to the people that live there. You may have heard the term *Nunavummiut*. The convention can also be applied to southern Canadians, such as *Antariummiut* for Ontarians, *Maanituvammiut* for Manitobans and so on. As well, we use it to refer to people from specific communities; *Sallirmiut* refers to people from Coral Harbour, and so *Taantavaimmiut* would be the approximation for Thunder Bay. I’m not sure what the best solution in English would be, with the term Eskimo falling out of favour. Inuit as an English racial term is the current reality.

I've seen a push for Inuktitut children's literature in syllabics, the hope being that young readers become young writers and wordsmiths. I also hear there is a recently established language authority and I have some concerns that their priority is to produce curriculum of similar quality to English language curricula. I believe this to focus too heavily on Inuktitut as a written language and there really should be curriculum focused on Inuktitut oral skills such as storytelling as well as drama and comedy.

Numbers

Ideally, the goal would be for a high school mathematics course to be deliverable in Inuktitut. There are many hurdles to this. First, the problem of Inuktitut having an underdeveloped writing system and second, the problem of needing to develop terminology for math concepts that would not exist in Inuktitut. These problems should resolve themselves over time, so long as we are not conquered again.

The big problem is that the language itself has a fundamental mathematical convention that goes against established conventions in English. Our names for the natural numbers are in base 20, rather than base 10. Or at least they were at some point. I find many supposed lists of Inuktitut numbers from the Internet and it's often the case that people impose a base 10 understanding on the language, but they do so in slightly different ways and so there are different conventions for numbers 6, 7, 8, 9 and 15, 16, 17, 18 19. They also often give a name for 100 when they should be giving a name for 400 which is the third-place value in base 20.

On top of everything, the names of the numbers are long and bulky, which works better within the context of the language, but less so in learning about numbers. Further, the names vary wildly between dialects. As far as I know, the first five are usually *atausiq*, *murruuq*, *pingasut*, *sitamat* and *tallimat*. Where I'm from, six is *arviniliit*, but people in other places say *itkatsrat* and I've read that people use *tallimallu atausirlu* which is five and one. Then I've heard mixed things, but my home dialect has seven as *arviniliillu atausirlu* (meaning six and one) and *arviniliillu marruurlu* (six and two) for eight. Nine is *qulingiluaqtuq* (it isn't ten). Ten is *quliit*, eleven is *quliilu atausirlu*, twelve is *quliillu marruurlu*, thirteen is *quliillu pingasurlu*, and fourteen is *quliillu sitamallu*. Fifteen, is sometimes *quliillu tallimallu*, but I like the Inupiaq who say fifteen is *akimiaq*, because then we can complete the pattern with *akimiaq atausirlu* and so on. But otherwise, it's on with *quliillu arvniliillu* and we run into the problem of *quliillu arviniliillu atausirlu* and *quliillu arviniliillu marruurlu* which are just terribly long words for seventeen and eighteen. Nineteen is *quliillu qulingiluaqtullu* which is ten and isn't ten. Twenty is *avatit*.

I would have rather had *arviniliit* as our fifteen instead of six, so that we can do *arviniliit atausirlu*, *arviniliit marruurlu* etc. I'm really not sure who has the authority to make or change the rules these days. If we're safely in opinion land, then I think nineteen should be *aavatingiliqtuq* or *aavatingiluaqtuq*, (it isn't twenty). And again, some lists have a word for one hundred as *unriti*, but that's a term appropriated to Inuktitut from the English the word hundred. It should be *tallimat avatit*, which translates to five twenties. The main trouble with teaching numbers with their Inuktitut names is that five

twenties doesn't line up with the representation 100. As a more egregious example, six twenties and twelve (*arviniliit avatiillu quliillu marruurlu*) doesn't line up with the base 10 representation of 132. Really, we need a new system.

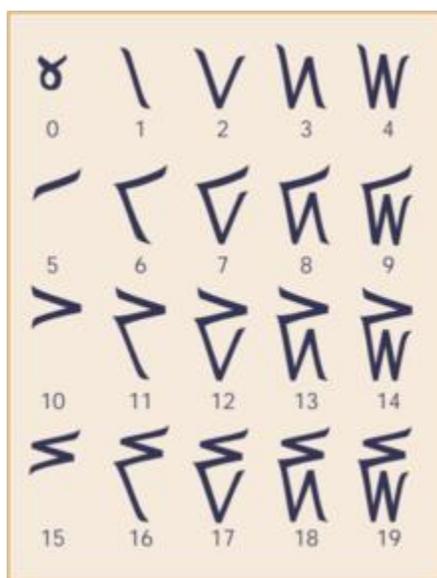


Figure 3: Kaktovik numerals, developed by children in Kaktovik, Alaska (Poirier, 2007).

The Kaktovik numeral system is an ingenious bit of iconography that illustrates the base 20 system as well as the sub-base of 5. Units are counted with the sharp slopes, while the 5s are indicated by shallow slopes. This allows a proper representation of our numeral system that respects the language conventions (Poirier, 2007).

There is not really good computer support for these characters, but an approximation can be achieved by using underlines on the standard base ten numerals. What I mean is that 6 = 6 and 16 = 6. This does get terribly confusing since it's hard to differentiate between base 10 numerals and base 20 numerals. The Kaktovik system solves these problems. One hundred in Inuktitut is *tallimat avatit* is now represented as

50 and one hundred and thirty two being *arviniliit avatiillu quliillu marruurlu* is now nicely 62 and understood as six twenties, ten and two.

Names and Kinship

I can imagine what it might be for a teacher to come up to the Arctic and see the difference, feel that culture shock, gain a bit of perspective, head over to the classroom and see that the class list is a set of good Christian names. Maybe they notice, maybe they don't. The records that I have been able to find about pre-colonial naming traditions teaches us that a person's name is equivalent to their soul (Freuchen, 1962). This sort of sacredness was reflective of the communal survivalist lifestyle. While family units would be the only regular companions, they would often visit or form camps with other family units to share meat and resources. In that situation, where there is no law, no court, ostracism is a harsh punishment. Your name is your good reputation, it's how people talk about you when you are not around, and it's what they say about you. When someone thinks of you in their head, they likely think of your name.

It was and is a tradition for Inuit to name newborn children after recently deceased family members (Owlijoot, 2014). This is understood to be a form of reincarnation, that the newborn and their *atiq*, (namesake) are spiritually connected. Through this tradition, communities become close knit and relationships between families can transcend generations. Live a good life and you will be reborn. Bring dishonour to your name and the consequence is that you and your line of namesakes will be forgotten, or worse, made infamous in stories, never to live again as no one

would name their child such an infamous name. But some live exceptionally good lives and so many children receive their name. People who are named after the same *atiq* are called *avvaq* (Owlijoot, 2014).

Many Inuit today have both English and Inuktitut names. The English names are a legacy of colonialism, of the Catholics that came through and baptised everyone, Christening them. Renaming a people with this sort of belief about names evokes a horrifying metaphor for cultural assimilation; changing a people down to their very souls. However, those renamed Inuit went on to live very respected lives and so their English names get passed on. It's often the case to give a child an English first name, reflecting that it was and often still is easier for people with such names to access government services, including healthcare and education. However, children are still given Inuktitut names as well and that's usually the name they commonly go by. More important than the names are the *tuq&urasiit* (kinship terms), such as father (*ataata*) grandmother (*amauq, anaanattiaq*), and the *sauniriit* (named) is to refer to their *atiq's* family (note the mixed language possessive) by the appropriate familial term even if they are unrelated and often in place of the term if they are related (Owlijoot, 2014).

My English name Peter is my dad's friend's name, who died young. His family lives in Thunder Bay and I'm not sure if they were made aware of the naming custom. My Inuktitut name, which is officially Judai, but is in fact ᐃᐅᐅ which Romanizes to Juutai and is most accurately a spoken name. I'm named after someone who would not have had an official spelling of his name until later in life. He was a friend of my *ataatattiaq* (grandfather), my mom's dad. His grandchildren call me *ataatattiaq*. My

ukuaq (wife of son) makes me *palauraaq* (bread, similar to Bannock) when I leave town.

Storytelling

A work of writing, an oral presentation, an animation with or without dialogue. A series of paintings. Some overturned rocks. Stories are a category of messages. It could be a book; it could be a blog post. Movies, TV shows. Graphic novels.

It's hard to pinpoint a definition, but there is a distinction between a textbook, an essay, a research article and a story. Such things may contain stories, but they aren't stories themselves. The common characteristics of a story include characters, places, and a series of connected events, meaningful or otherwise. Like any message, it could be well crafted, well presented or it could just as easily not be. A good story is independent of the storyteller; a bad storyteller can tell a good story badly.

In 2015, Noel McDermott arranged for a number of Elders from all over Nunavut to come together to tell the *Unikkaqtuat*. (2015) These are the collection of traditional stories that have been passed down through the generations and are the basis of our history and knowledge systems. The report also describes the meticulous detail in translating the stories as told by the elders. The elders spoke in Inuktitut, but the stories are available in written English.

Storytelling has been the primary mode of cultural transmission for the Inuit prior to colonialist influence. We have a wonderful collection of ancient stories, which remain consistent along all of *Inuit Nunangat*. The consistency of detail even among

different dialects of Inuktitut (McDermott, 2015) should put to rest certain arguments about the effectiveness of this mode of transmission.

Part of that has to do with how stories work. The Inuit did not invent stories, they are universally used among all the cultures of the world, and so general analytical tools can be applied to them. These are things such as breaking a story down into its setting, characters, conflict, action and resolution, as well as analysis of technique and principles such as Chekov's gun. Inuit stories often employ lamp shading where they flippantly explain away irrelevant details that were lost to time. They are constructed to be memorable, with details chosen such that you're reminded of a relevant story when you encounter such details in your life (McDermott, 2015).

The poster child for the traditional Inuit story has to be the story of the *qallupilluk*. This is a story of the sea creature, similar to the western idea of a sea hag, that hides beneath the cracks in the ice, looking to steal children away. They say she has long fingernails that tap along the underside of the ice to lure children close. She then breaks through the ice and puts children in her *amaut*, which is a hooded parka that Inuit women wear for carrying children.

The point of the story is to scare children away from playing near the cracks in the ice in the spring. During this time, the ice begins to break up and it makes this peculiar sound, like long fingernails tapping on the underside of the ice. This is an indication that the ice is fragile and dangerous to be around. Children are more likely to question whether the ice can support their weight, but less likely to question the existence of a hungry sea monster out to get them. When a child becomes old enough

to recognize that the monster does not exist, the child also becomes aware of the real danger of the ice and should want to perpetuate the story for the younger children, in much the same way southerners like to play the Santa Claus game.

The Mighty Hunter

Many stories feature characters. It's a good mindful practice to recognize that we view and understand fictional characters using the same mental apparatus that we use to view and understand real people. Characters from stories are an excellent means of practicing empathetic thinking, without too much risk of causing harm to real people through mischaracterization.

There's a thought experiment that I find useful for thinking about the cultural scenario the modern Inuk searches for and sometimes finds themselves in. Imagine a pure nomad, living out on the tundra, still living the traditional life isolated from the trappings of modern society. To survive, they necessarily have a family, and they care for a set of dogs. They are monolingual and speak some dialect of Inuktitut. They are cautious and knowledgeable. They are strong and quite capable of supporting their own lifestyle out there on the land at an income of \$0 a year. They have one name each but call each other by familial terms. The Mighty Hunter's Wife is also important to understand. While I would like to be sensitive to modern gender issues here, the extreme conditions of the land do not care. Formidable in her own right; clever, cunning, and skillful, but still defined by her relationship to her husband. He can't live long without her either, but the power dynamic is still in his favour. They have children

that are loved very much. These are the characters of the Mighty Hunter and his family.

I like to imagine that one day, the Mighty Hunter and his family happens upon a modern Inuit community. They are welcomed, fed, and given a house. They are told about the world and all the new things that have come about since the *qallunaat* came. Their children can come and play with the town's children, and maybe they would like to go to school. It is very useful to imagine the kinds of things that would have to be explained, and how one might go about explaining those things to the Mighty Hunter, his wife, and their children.

Respect for Elders

The image of the rebellious teenager is a southern stereotype that really seems like it should be one of those red flags for society. Up north, the Elders have earned respect through their ability to survive. Many Elders were born on the land and experienced the full effect of colonialism during the span of their lives. Respect is shown through deference and courtesy. Speak when spoken to and do not impose. The words we use to describe this sort of deference is fear, but it does not have the same connotation. Fear is a constant companion that keeps you alive and aware of your surrounding. It's not a tragedy to experience fear.

Let's put it this way. If global civilization collapses, the teacher in the north faces quite the lifestyle change, while the Elder will continue their lifestyle rather unbothered. It would be good if they like you. If they don't like you, that could become problematic. Your opinion doesn't matter. When the *qallunaat* started coming north,

Freuchen (1962) describes the Elders at the time regarded them with the same attitude they would towards children. This is because they would go up with preconceived notions that get smashed to bits against the harsh reality of the arctic and would necessarily have to reconstruct a new worldview like a child would. To an Elder, the way time is organized with the twenty-four-hour days and the fifty-two, seven-day week year would be something that came to the north and *qallunaat* seem pretty bothered about it frequently.

A thing to know specifically is that the gift of tobacco tradition is common to southern Indigenous cultures, but the Inuit do not have this tradition. Regardless, an Elder probably wouldn't say no to cigarettes. Depends on the Elder.

Traditional Economy

Back in the day, in the old days, in the age before money, there were just things in the world, resources out there for free. You wouldn't even need a permit. There were rules, about how and when to go about collecting resources. Most of the time, the rules were for obvious safety purposes. However, even if a certain taboo were to seem silly to you, it's usually not worth betting your life on it.

I've written a bit about traditional economy in a previous essay and there is this wonderful literary convention that allows me to just make you read that:

To hunt the mighty *arvig* (bowhead whale) and thus have oil and heat to survive the winter, the Inuit had to do a lot of running around. [Danish arctic explorer, Peter] Freuchen (1962) describes the life he led in Greenland and throughout the north. He observed that there were many resources that the arctic had to offer to the Inuit. Skins and furs from different land mammals; eggs and feathers from birds; skin, oil, baleen, and ivory from different kinds of whales;

skins from the different kinds of seals; ivory from walrus; and food and bones from all. They also had access to arctic char, various plants including berries and tea, and driftwood that would wash up in regular locations. Technology included boats, dogsleds and harnesses, many hunting implements, clever clothing including the *amautik*, which is a coat that has a space for infants, and the *qulliq* (stone lamp) that burned whale oil for heat. The trouble was that these resources often had miles of tundra and mountains between them. By necessity, the Inuit would travel for miles with their dogs and sleds. Life was centered around the mighty hunter, his ferocious dogs and his clever wife and they as a team would provide for and teach what children they had and share what they could. They were constantly on the move toward whatever they needed for whatever reason.

The impression that I get from the stories are the most common causes of trauma or otherwise death was bad weather and bad luck. I also like to acknowledge the difference in information availability during that time, which really sells the wisdom of respecting taboos even if you don't quite understand the reasoning behind them.

Modern Mixed Economy

The modern economy in Nunavut is a mix between the wage-based economy of our colonial oppressors augmented by the subsistence harvesting of the local ecosystem, which is necessarily a conservation effort. A successful family model that I've seen work is where the wife works while her husband cares for the home and children during the week. The income is spent on hunting supplies for the husband to go out and collect the majority of the calories during the hunting seasons.

I should say that these gender roles are not terribly entrenched, given how recently modernization has uprooted the incredibly entrenched gender roles of the traditional life. The typical scenario I describe is a reflection on those traditional roles; I've heard it argued that the expectations for Inuit women line up better with the

workplace expectations of the southern Canadian economy and so they tend to fill authoritative, supervisory and administrative positions more often than men. This often leaves men with very few opportunities to make steady money. We are not unaware of the typical southern expectations for men to make lots of money.

It often becomes the case that a young man sees no reason to pursue an education that will not help him. A high school education only seems worth it if the plans are to pursue a trade or business or as a prerequisite for moving away from the Inuit homeland. Rather, I do think that this could be improved with a focus on environmental science, including sustainable harvest as well as traditional and modern hunting practices and possibly into philosophy. As well, modern hunting practices include subjects such as marksmanship, vehicle maintenance and emergency repair, and outdoorsmanship or excursion planning. Quite a lot of curricula could be developed that would be helpful and relevant to the typical lifestyle of the modern Inuit man.

The traditionally women's skills involved a lot of resource processing. Skins needed to be prepared through various meticulous and exhausting efforts. Clothing is still in use and is still made. Modern Inuit clothing often takes advantage of imported fabrics alongside traditional furs and waterproof stitching techniques. Among the clothing items, they make *kamiks* (*kamiit* if you want the proper Inuktitut plural). They are sealskin boots. I have heard that modern footwear can be too supportive and disrupts the natural development of leg muscles in children. A *kamik* is essentially a tough sealskin sock and should not have the same problem.

To me, this seems like a perfect opportunity to set up a program where high schools students learn to make *kamiit* for the next year's group of kindergarteners. The whole process, including the hunt and skin work can be arranged for high school students. Of course, that would require the collaboration of experts in skin preparation and seal hunting, which would need to be paid positions considering the amount of work involved. And of course, we do not need to enforce the gender segregation like they did in the old days, though I wouldn't be surprised if interest loosely falls along those lines for a little while at least.

Conclusion

This is a neat little section at the end of a paper that sums up what has been written. A good concluding paragraph does the job of summarizing and bookending the disseminated knowledge for easy recollection.

We have covered decolonization, a brief intro to Angeletics, and then a description of Inuit culture to complement an Angeletic approach. We talked about the land, the language and associated mixed language educational challenges. We talked about the northern economy and what subjects might interest young Inuit that wish to stay in the north after going to school.

The idea here is to learn to become mindful of the cultural differences between the Canadian south and the Canadian north. Really, there are cultural differences between every group of Canadians separated by geography. The differences are noticeably more pronounced between settler and Indigenous cultures. The Angeletic approach, to become more mindful of the preconceptions of the message creator as

well as the preconceptions of the message receiver, would be applicable in any cross-cultural communication dynamic, though there's no universal procedure. Every new culture you come across demands due diligence and an open mind.

References

- Adams, D. (1997). *The Hitch Hiker's Guide to the Galaxy Omnibus*. William Heinemann.
- Amagoalik, J. (2016). *Changing the Face of Canada: The Life Story of John Amagoalik* (L. McComber, Ed.). Nunavut Arctic College.
- Berger, P., & Epp, J. R. (2007). "There's No Book and There's No Guide": The Expressed Needs of Qallunaat Educators in Nunavut. *Brock Education Journal*, 16(2), Article 2. <https://doi.org/10.26522/brocked.v16i2.86>
- Brody, H. (1991). *The People's Land: Inuits, Whites and the Eastern Arctic*. Douglas & McIntyre.
- Brody, H. (2002). *The Other Side of Eden: Hunters, Farmers, and the Shaping of the World* (1st edition). North Point Press.
- Canada, P. I. W. of. (2006). *The Inuit Way: A Guide to Inuit Culture*. Pauktuutit Inuit Women of Canada.
- Capurro, R. (2011). Angeletics – A Message Theory. In R. Capurro & J. Holgate (Eds.), *Messages and Messengers—Von Boten und Botschaften* (pp. 31–42). Wilhelm Fink Verlag. https://doi.org/10.30965/9783846750476_004
- Freuchen, P. (1962). *Peter Freuchen's Book of the Eskimos*. Barker.
- Government of Nunavut, D. of E. (2020a). *School Leaders' Key Essentials Guide Your First 35 Days Draft – May 2020*.
- Government of Nunavut, D. of E. (2020b). *Teachers' Key Essentials Guide Draft – May 2020*. https://gov.nu.ca/sites/default/files/teacherskeyessentialguide_eng.pdf
- Hinds, M. (1958). *School-House in the Arctic* (First Edition). Geoffrey Bles.
- Ittinuar, P. F. (2008). *Teach an Eskimo How to Read-: Conversations with Peter Freuchen Ittinuar*. Nunavut Arctic College.
- Kameda N. (2004). Miscommunication factors in Japanese-US trade relationship. *Doshisha University world wide business review*, 5(2), 11–26.
- King, T. (2013). *The Inconvenient Indian: A Curious Account of Native People in North America*. Anchor Canada.
- Kovach, M. (2009). *Indigenous Methodologies: Characteristics, Conversations and Contexts*. University of Toronto Press.
- McDermott, N. K. (2015). *Unikkaaquat: Traditional Inuit Stories*. 390.

- McPherson, D. H., & Rabb, J. D. (2014). *Indian from the Inside: Native American Philosophy and Cultural Renewal, 2d ed.* McFarland.
- Murdoch, J. (1981). *Syllabics—A successful educational innovation.*
<https://mspace.lib.umanitoba.ca/xmlui/handle/1993/9207>
- National Committee on Inuit Education & Inuit Tapiriit Kanatami. (2011). *First Canadians, Canadians first: National strategy on Inuit education 2011.* Published for the National Committee on Inuit Education by Inuit Tapiriit Kanatami.
- Neely, A. (2020, September 7). *Music Theory and White Supremacy.*
https://www.youtube.com/watch?v=Kr3quGh7pJA&t=1122s&ab_channel=AdamNeely
- Netser, S. P. (2013). *Seeking identity.*
<https://www.islandscholar.ca/islandora/object/ir:10619>
- Nunavut, D. of E. (2007). *Inuit Qaujimaqatunqangit Education Framework.* Nunavut Department of Education, Curriculum and School Services Division.
https://gov.nu.ca/sites/default/files/inuitqaujimaqatunqangit_eng.pdf
- Nunavut, D. of E. (2008a). *Ilitaunnikiliriniq Foundation for Dynamic Assessment as Learning in Nunavut Schools.* Nunavut Department of Education, Curriculum and School Services Division.
- Nunavut, D. of E. (2008b). *Inuglugijaittuq Foundation for Inclusive Education in Nunavut Schools.* Nunavut Department of Education, Curriculum and School Services Division.
https://gov.nu.ca/sites/default/files/inuglugijaittuq_eng.pdf
- Okpik, A. (2005). *We Call it Survival: The Life Story of Abraham Okpik.* Nunavut Arctic College.
- Owlijoot, P. (Ed.). (2014). *Inuit Kinship and Naming Customs* (Bilingual ed. edition). Inhabit Media.
- Poirier, L. (2007). Teaching mathematics and the Inuit community. *Canadian Journal of Science, Mathematics and Technology Education*, 7(1), 53–67.
<https://doi.org/10.1080/14926150709556720>
- Quassa, P. (2016). *We Need to Know Who We Are: The Life Story of Paul Aarulaaq Quassa* (L. McComber, Ed.). Nunavut Arctic College.
- Shannon, C. E., & Weaver, W. (1998). *The Mathematical Theory of Communication.* University of Illinois Press.
- Stevenson, W. (2000). *Calling Badger and the Symbols of the Spirit Languages.*
<https://creeliteracy.org/wp-content/uploads/2012/12/calling-badger.pdf>

Tester, F., & Kulchyski, P. (1994). *Tammarniit (Mistakes): Inuit Relocation in the Eastern Arctic, 1939-63* (First Soft-Cover Edition.). UBC Press.

Truth and Reconciliation Commission of Canada. (2016). *Canada's Residential Schools: The Inuit and Northern Experience: The Final Report of the Truth and Reconciliation Commission of Canada, Volume 2*. MQUP. <https://doi.org/10.2307/j.ctt19rm9tm>