

# Akuttujuuk: Knowledge Building for Bilingual Education in Inuit Nunangat

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**Abstract:** Funded by the ArcticNet Network of Centres of Excellence, Akuttujuuk is a two-year design experiment which explored the potential of networked technologies and past experiences with Knowledge Building in the Canadian arctic to address the problem of effective bilingual education for Inuit. This paper outlines the background to the network, its design, and the initial results. It will be relevant to those seeking to explore Knowledge Building's role in minority cultural-linguistic contexts.

## Introduction

Equitable participation in a knowledge society for students from marginalized contexts is a goal professed by the public education systems in Canada, something which is as true in Canada's newest territory, Nunavut, as it is in any other. Unlike the rest of Canada, however, Nunavut was created in 1999 after nearly three decades of negotiations by its Indigenous population, the Inuit. With 85% of its population Inuit, Nunavut has the dual purpose of providing a homeland built on and safeguarding the language, culture and identity of its indigenous population and navigating its journey to a meaningful and productive place in Canada and the world in the 21<sup>st</sup> century. Among the keys to the success of this dual purpose are developing leaders in Inuit education and increasing the number of bilingual educators and programs. (Kanatami, 2011) Launched late in 2014, the Akuttujuuk network was established to build on previous experiences with Knowledge Building in Nunavut to contribute to efforts to develop Inuit leaders in education and support the understanding and implementation of effective bilingual education strategies across Inuit Nunangat.

This paper will outline previous experiences with Knowledge Building in Nunavut and highlight their roles in shaping the goals and design of the Akuttujuuk network. It will then provide an analysis and discussion of the role of Knowledge Building within the network and conclude with a discussion of possible future directions.

## Background to Knowledge Building in Nunavut

Formal education began to supplement traditional Inuit practices of childrearing and education with the establishment of federal day schools in the 1950s as part of the federal government's initiatives to bring the Inuit population of the Canadian arctic into the mainstream society. However, as government policies and practices and the increasing pressures of southern Canadian language and culture began to disrupt traditional Inuit ways of life, a tension arose between supplementing traditional Inuit practices and supplanting them. Beginning in the 1970s and carrying through to the present, efforts have been made to develop bilingual and bicultural schools that would support and enhance the growth of Inuit identity as well as provide access to the knowledge and skills requisite for full participation in the broader society into the 21<sup>st</sup> century. (McGregor, 2010)

With the realization that wide-area computer networks could potentially do much to address the challenges to education created by a tiny population scattered in small isolated communities across a vast and harsh geography, Knowledge Building became a part of these efforts in the early 1990s. With a principled approach that recognized the agency of students in terms of both the questions they brought to an empty database and their roles in exploring those questions, Knowledge Building had the potential to value the background knowledge and beliefs of Inuit children as they developed the skills to work collaboratively with that knowledge. (A McAuley, 1998; A. McAuley, 2001, 2004, 2009)

While it should have strengthened efforts to address the dual purposes for education in the eastern arctic and while various initiatives, notably the 2008 Education Act, seemed to indicate that this would be the case, the creation of Nunavut in 1999 did little to mitigate the tension between the roles of Inuit and mainstream cultures in the school system. Part of the reason for this was that as the most highly educated Inuit in the Territory, Inuit teachers were taken from schools to fulfill roles in the new government, thereby undermining the expertise and leadership needed for successful bilingual and bicultural education at the school level. Based on local demand (O'Donoghue, 2005), in 2006-2010 and again in 2010-2013, an MEd program for Inuit educators was established to address this gap, the first graduate degree to be offered in Nunavut.

The three-year, course-based Nunavut MEd was designed to integrate Inuit perspectives and language into a rigorous graduate program through practices which included co-teaching between Inuit and Qallunaat (non-Inuit)

instructors, participation by Inuit elders, and intense face-to-face courses offered within Nunavut. However, because of the costs and the uncertainty of weather conditions, the winter course each year was offered fully online using Knowledge Forum and an explicit knowledge-building approach. To promote Knowledge Building across courses, a single database was used for each iteration of the program, with the default login view shifting to reflect the current course offering. Although available to all instructors to support and supplement their courses, positive student responses led to Knowledge Forum being used extensively to support the face-to-face courses as well as those online. (A. McAuley & Walton, 2011; Walton, 2010; Wheatley, 2015)

## **The Origin and Goals of the Akuttujuuk Network**

The Akuttujuuk network was created in 2014 in response to a growing realization by Inuit organizations, notably the Inuit Tapiriit Kanatami, the national Inuit organization, that Inuktitut was eroding across Inuit Nunangat, not just in Nunavut, and that without Inuit leadership and effective bilingual education the trend was likely to continue. (Kanatami, 2011) Furthermore, it recognized that the large institutions with the primary responsibility for ensuring the success of bilingual education such as governments could not achieve this goal without building on local initiatives and acknowledging local needs and challenges. (Wyman, 2010) With the support of 20 of the 37 Nunavut MEd graduates and local organizations such as the Coalition of Nunavut District Education Authorities and the Nunavut Literacy Council as well as government departments and institutions, the Akuttujuuk network was set up to investigate the question, “Under which circumstances are Inuit educational leaders and researchers empowered to generate and communicate, as well as access, evaluate and apply various types of knowledge about quality bilingual education to improve educational outcomes in Inuit Nunangat?” With the larger goal of supporting evidence-based decision-making and practices through the syntheses of broad based knowledges of educational leaders and researchers, parents, community groups, teachers, curriculum-developers, and policy makers, it set out to

- 1) Facilitate informed dialogue among Inuit educational leaders, parents, community groups (such as Nunavut District Education Authority members), teachers, administrators, curriculum developers, policy makers and emerging scholars regarding current challenges, successes, and promising avenues for improving and enhancing bilingual education within Inuit schools and communities;
- 2) Analyze, synthesize and compare the recent and relevant scholarly literature related to legislation, policies, and promising practices in bilingual education in Inuit communities in Canada;
- 3) Mobilize and disseminate knowledge based on evidence-based practices in bilingual education with relevant application to Inuit Nunangat, including creation of short informational videos that act as learning modules targeted at the public, parents, teachers and all decision makers.

## **Network Design**

Named from a suggestion by a Nunavut MEd graduate and network member, *Akuttujuuk* is the Inuit name for the two stars that appear above the horizon to mark the end of the long arctic winter. It was selected to create a unifying sense of identity for the various activities undertaken by the network members as well as to embody a sense of hope for the future of bilingual education.

In the context of this project, the network refers to the relationships between the people, the knowledge objects they choose to share, and the infrastructure that supports these interactions. The goals of the project identify a wide range of potential participants and forms of interaction ranging from casual dialogue and relatively straightforward sharing of experiences and resources to thoughtful and critical analysis and synthesis of complex documents. The goals required support for Inuktitut and English, at least, as well as the potential to both access and contribute to the network. Finally, the network infrastructure had to operate reliably over the often erratic northern internet connections.

As Table 1 shows, the network’s technical infrastructure was designed to support a range of networking activity between members. As a readily accessible and widely used public platform, Facebook provided a space for casual interaction and sharing among a membership that could be easily expanded without a major need for training or troubleshooting. The original intent was the creation of an open Facebook group, but for reasons that will be discussed later, the group was closed at the request of network members. A Knowledge Forum database was set up to support the kinds of higher-level discussion, critique, and syntheses that had been seen from network members during the Nunavut MEd. A WordPress blog, *Akuttujuuk.ca*, was created to share new knowledge as widely as possible as well as to encourage moderated discussion and casual critique of those postings. It also served as the easily findable link to the other components of the network infrastructure. Finally, recognizing that alternatives to print would widen potential participation, channels on YouTube and Isuma.tv, the latter a video sharing network

designed specifically for reliable operation in small arctic communities, were set up to share video examples of successful bilingualism practices.

From the perspective of knowledge-building principles, the network infrastructure was designed to support knowledge building discourse for the collaborative creation of knowledge about and appropriate implementation of successful bilingual education practices. The issue of bilingual education in Inuit Nunangat is an authentic problem which requires real ideas from a diverse community if it is to be addressed effectively. Table 1 further correlates each element of the network infrastructure with the knowledge building principles it primarily embodies.

Table 1: Akuttujuuk Network Infrastructure.

	Intended Function	Open/Closed	Knowledge-building Principles
Facebook	Casual interaction and sharing	Closed	Democratizing knowledge, Pervasive knowledge building, Idea diversity
Knowledge Forum	Discussion, critique, and synthesis of knowledge of bilingual education	Closed	Rise above, Knowledge building discourse, Constructive use of authoritative sources, Improvable ideas
Akuttujuuk.ca Blog	Public sharing and discussion of knowledge created by the network	Open (postings moderated)	Rise above, Constructive use of authoritative sources, Pervasive knowledge building, Symmetric knowledge advance, Democratizing knowledge, Community Knowledge/Collective responsibility, Epistemic agency, Idea Diversity, Improvable ideas
YouTube/Isuma.ca	Public sharing of video objects.	Open access (postings restricted)	Democratizing knowledge, Community knowledge/Collective responsibility

### **A Note on Methodology**

The Akuttujuuk network is an emergent form of participatory action design research. Open bilingual access to a broad range of potential participants recognizes that knowledge exists both what is stated explicitly about bilingual education in Nunavut and what demonstrated tacitly through the programs and practices currently in place. Further, the network recognizes that solutions to the problems impairing successful bilingual education across Inuit Nunangat are a collective responsibility. Akuttujuuk is an experimental effort to build a framework for the connections that will bring together explicit and tacit knowledges to inform practices that will transform bilingual education.

Akuttujuuk was set up with the input of the instructors, researchers, and students who had participated in one or both of the Nunavut MEd programs. Additional participants were recruited through presentations and contacts made at conferences and recommendations of current network members. Prospective members were also invited to apply through the Akuttujuuk.ca website.

Recognizing that the network needed examples of current successful practices from across Inuit Nunangat, field studies to produce documentary videos were planned for Nunavut, Nunavik, and Nunatsiavut. In addition, a plain-language synthesis of the principles underlying effective bilingual education was developed for Inuit Nunangat from an extensive literature review (Tulloch, Lee, McAuley, & Walton, 2016).

For the purposes of this paper, data includes postings to the Akuttujuuk Facebook group, website, and Knowledge Forum database. The analysis is a preliminary exploration of the relationship between the number of postings in each medium, who made the postings (e.g. researcher, network member; Inuit or non-Inuit), and their relationships to the goals of the project as a whole.

### **Results and Discussion**

Table 2 summarizes the breakdown of the contributions by medium. Twenty contributors initiated 162 top-level contributions to the “secret” Facebook page. Of those contributions, 83% were contributed by researchers, 16% by non-researchers and 20% by Inuit. In Knowledge Forum, ten contributors made 60 contributions, of which 75% were made by researchers and 15% by Inuit/non-Inuit. With respect to the Akuttujuuk.ca blog, five contributors

made 20 contributions, 85% of which were by researchers and 15% by non-researchers. The substance of two of the 20 contributions were guest posts by Inuit, as was one of the comments.

Table 2: Akuttujuuk Network Contributions.

	Contributors	Contributions	By Contributors (Researcher/Non) (% of total)	Inuit contributions (% of total)
Facebook	20	162 (top-level postings)	136 (83%) / 26 (16%)	32 (20%)
Knowledge Forum	10	60	45 (75%) / 15 (25%)	15 (25%)
Akuttujuuk.ca	5	20 (includes 2 guest posts; 3 comments)	17 (85%) / 3 (15%)	3 (15%)

The data is inadequate to substantiate hard-and-fast conclusions; however, it does suggest a number of considerations that may be relevant to larger-scale Knowledge Building initiatives.

First, although each of the online environments supporting the network was closed to unmoderated public access, the Facebook group was closest to the day-to-day online activity of most participants; although no one became a member of the group without an invitation from a current member, all participants had Facebook accounts and accessed Facebook regularly. By contrast, although all participants had experience with Knowledge Forum—one of them described it as a “lifeline” for the role it played in the Nunavut MEd—it was an addition to their online routine as opposed to integral. The level of cognitive engagement required to support meaningful interaction around the topics suggested, almost entirely by researchers, was far greater than required for Facebook. Although the percentage of Inuit/member contributions to the Knowledge Forum database exceeded those to Facebook, most of the former represented first efforts to access a new database and were never followed up; contributions sharing successes in Inuit bilingual education or asking for critiques were almost exclusively posted by non-Inuit researchers.

Second, the original intent of the Facebook group was to provide an open and accessible path to sharing of bilingual education beliefs and practices that would lead to deeper understanding and implementation of the principles underlying effective bilingual education. Very early on, however, members of the Facebook group expressed significant concern that surveillance of an open group might lead to negative repercussions for contributors. As a result, the “private” group was changed to “secret”. While this enabled existing participants to speak freely, it also effectively excluded a significant avenue to broad network growth by restricting the discussion going on.

Finally, the small number of contributors and contributions to the Akuttujuuk.ca blog could be attributed to the fact that despite being openly accessible, its postings were moderated. As a result, postings were limited to those initiated and/or approved by the moderators. Although this did restrict the number of postings, it was the only element of the network infrastructure as it stands that did draw in new members.

## **Conclusion**

The Akuttujuuk network is probably an over-ambitious attempt to harness the potential of Knowledge Building to support principle-based approaches to the very real problem of bilingual education in Inuit Nunangat. Nevertheless, it also illuminates some of the issues and challenges facing the collective and collaborative construction of knowledge to effect social change, particularly for remote and marginalized communities. Further research is needed to determine from network members what they feel might encourage broader and deeper engagement, the former with respect to residents of Inuit Nunangat interested in successful bilingual programs in their communities, the latter with respect to the critique and application of knowledge about bilingual education.

The relatively high level of contributions to the Facebook group is also worthy of further analysis. Many of the 162 top-level postings had comments, many of those by Inuit network members. In addition to the postings themselves, Facebook data indicated that the majority of postings were viewed by over 75% of the participants, some of whom used the “like” function to make a quick response. While Facebook engagement may not have been deep, it was persistent. Although Facebook’s “like” function has been tested in various versions of Knowledge Forum, there may be other tools and techniques which could be used to lower the threshold for deeper engagement in Knowledge Building.

The democratization of knowledge in terms both of knowledge access and construction is a key knowledge-building principle, particularly given the shifting power dynamics of an increasingly networked world. While promising, the results of the Akuttujuuk network’s attempt to build on past experiences with Knowledge Building in

the Canadian arctic to address the very real problem of bilingual education for Inuit also demonstrates the complexity of that task.

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