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The report offers insights into the hard work behind an Inuit Grounded and Led Educational System and New Possibilities. It was an honor for all of us to work with you, to learn with you, and to join you on that journey

Promotional Summary

Studies on school perseverance in Inuit Nunangat have noted educational opportunity gaps that persist for Inuit youth and young adults. At the same time, there are many unique opportunities and projects that emerged in recent years, led by Inuit and their communities, responding to community concerns while also reducing that opportunity gap, and contributing to self-determination and the resurgence of culture. The goal of this project was to describe the educational contributions of programs and projects led by Inuit in three communities, through the lens of lifelong learning and perseverance as grounded in Inuit Qaujimajatuqangit (IQ) or Inuit epistemology. The study focused on the following programs within three different communities: 1) Arviat, Nunavut: a) Arviat Film Society; b) Young Hunters Program; and c) Youth Environmental Monitoring Program; 2) Pond Inlet, Nunavut: Expanded Leadership to Study Water Quality; and 3) Sanikiluaq, Nunavut: Arctic Eider Society, their Arctic Sea Ice Educational Package, as tested in some communities in Nunavik. Results suggest that the programs were experienced as empowering by Inuit youth and their mentors, offering both opportunities to discover their strengths and build new skills, resulting in contributions to the common good of their communities. The programs also supported the revitalization of language and culture, the blending of Indigenous ways with Western ways, and closed an opportunity gap, in support of perseverance, made evident through engaged lifelong learning and pride in being Inuit. The study calls for enhanced Inuit control in education and offers insights into what linguistically and culturally relevant education might imply. The study calls for the proper resourcing of schools and communities to pursue future education in ways Inuit have always known to be true, deeply grounded in indigenous leadership models, with education in school, on the land, and the community, working in a complementary fashion and together, contributing to local capacity building and the common good.

Project Summary

Contributions of Inuit-led Community Programs and Environmental Stewardship to Lifelong Learning and Perseverance

1. Principale question

Studies on school perseverance in Inuit Nunangat have noted educational opportunity gaps that persist for Inuit youth and young adults. At the same time, there are many unique opportunities and projects that emerged in recent years led by Inuit and their communities, responding to community concerns while also reducing that opportunity gap, and contributing to self-determination and the resurgence of culture. The goal of this project is two-fold: 1) To describe the educational contributions of such projects in three communities to lifelong learning and perseverance, understood through the lens of *Inuit Qaujimajatuqangit (IQ)* and grounding in Inuit epistemology.; and 2) to offer stories of lifelong learning pathways to illustrate the manner these opportunities add up and contribute to the making of a human being or *inunnguiniq*. In doing so, the project distances itself from other work that has looked at perseverance through a deficit perspective and Western lens, which led to a focus on problems related the educational attainment of Inuit youth within schools, while ignoring the rich forms of education Inuit have always known to exist and been engaged in.

Through action-research, grounded in indigenous research methods and protocols, the project took form over time. Each program was visited and dialogue circles conducted with youth and instructors, mentors and other key adults associated with the programs in each community. A total of 34 adults, 2 elders, and 16 youth participated. Six case studies were also developed of lifelong learning pathways. Visits of the programs, analysis of video footage of program activities, and informal conversations with community members over the duration of the project further enriched the stories that emerged.

2. Main Results

As Inuit-led programs, they embody a vision of learning deeply grounded in Inuit ways of knowing and being or Inuit Inuit Qaujimajatuqangit (IQ). These programs build on strengths youth bring with them, and through a cycle at the heart of IQ and its learning model, implying observation, practice, feedback, reflection and personal improvement, offer youth opportunities to develop new skills and strengths that then lead to the seeking out yet new opportunities, with all contributing to the making of a human being or *inunnguiniq*. Implicit in this learning model are the IQ principles of *pilimmaksarniq* or

becoming skilled and capable so that you can use your skills to improve the lives of those around you, *qanuqtururangniq* or the ability to be resourceful and think deeply to seek solutions and better ways of operating or making good decisions, *iqqaqqaukkaringniq* or being innovative and creative technically so that you bring the best of every resource at hand to bear in a given situation. *Pilimmaksarniq* – becoming skilled and capable is always done in a mentorship/apprenticeship way of learning where those with expertise help you develop your skills. You are then expected to practice continually in order to build your capacity with these skills and to experiment through trial and error to continually improve of your skills and knowledge until you are recognized for mastery in the field of skill you are pursuing.

For Inuit, all learning happens within the context of *ilippallianginnarnik* or engagement with continuous, progressive, lifelong learning. Participation in programs is also about giving back. Hence, once youth have experienced mentorship in one program, youth may become mentors in another program. This is how the concept of *pijitsirniq* or serving to meet the needs of others is applied in the continuous learning context. Participation in the programs also facilitated the rebuilding of relations between youth and elders, and other community members.

The blending of Inuit with Western, or traditional with the modern was at the heart of the programs and also curriculum developed by Arctic Eider Society. Given everybody was learning from each other, through relations, contributed to making the programs mutually sustaining. Participation in diverse Inuit-led programs over time led to student empowerment and community well-being. The documented lifelong learning pathways make evident the nonlinear manner Inuit youth pursue learning opportunities over time, some implying moves into Western systems in urban centers far from home while others imply local forms of engagement in ongoing education or contributions to the good of the community. Given opportunity gaps, interruptions are common, yet lifelong learning also has to be understood in a nonlinear manner, with programs as the ones described, offering unique opportunities that then become key building blocks for youth and young adults to develop new strengths and then mobilize, as they take advantage of new and different opportunities in their communities, or beyond. Given the current educational infrastructure in Inuit Nunangat, and given that important learning not only happens in institutions but in the community, and is tied up in intergenerational relations, effective navigations imply the rebuilding of relations that have been broken through Western school systems and practices. The programs documented contribute to it in important ways.

The project makes evident how change in education supportive of genuine lifelong learning for Inuit has to come from *within* the communities. Programs as the ones described here contribute in important ways to language revitalization and relation building, as they blend Inuit ways with Western and are led by Inuit.

3. Some Solutions

1) *Enhanced Inuit Control in Education*: Leadership and decision making should be shared to a greater extent as in traditional Inuit culture. 2) There needs to be a greater emphasis on *Linguistically and Culturally Relevant Education*. 3) *Vigilance about the Use of Western Standpoints in Education Research*: Education should encourage navigations among epistemologies. Only through such navigations and a deep grounding in local culture can learning and education become medicine (valuable and desirable). 4) There needs to be *proper resourcing of schools and communities* (infrastructure, financial support, local capacity building & training).

4. Context of Project, Aligned with Funding Call, and as Defined by Partners

Axe 4.1. Quelles sont les stratégies des organismes scolaires ainsi que les approches pédagogiques à privilégier pour répondre aux besoins des élèves et des étudiants des Premières Nations et pour favoriser leur accès aux études ainsi que leur persévérance et réussite scolaires?

The study speaks to Education in Inuit Nunangat and has important implications for both, the formal educational system in place, as well as community-based initiatives managed through the communities, environmental stewardship programs and community organizations led by Inuit and their associations. The project is also of importance to scientists and Inuit organizations committed to educational outreach and environmental stewardship. The curriculum that evolved from such work is of importance to educators, curriculum developers and anybody involved in educational outreach in Inuit Nunangat, while it could also be of importance to educational institutions at large, informing them of what is at stake in terms of climate change, cultural resurgence and reconciliation.

Axe 4.2. *Quelles sont les stratégies des organismes scolaires ainsi que les approches pédagogiques les mieux adaptées à la réalité des jeunes autochtones pour favoriser leur persévérance scolaire lors de la transition d'une école de bande vers un autre établissement du réseau d'éducation québécois ou d'un ordre d'enseignement à un autre?*

Lifelong learning pathways make evident challenges with linear models of perseverance and movements from one educational system to the next, which undermine the rich

learning opportunities that have emerged from community and Inuit-led initiatives as those described and which constitute Inuit well-being and lifelong learning and perseverance in to them empowering ways, deeply grounded in cultural revitalization and Inuit ways of knowing and being or IQ, contributing to the common good. Closing the opportunity gap implies a rich offer of activities during years of schooling but also once young adults leave high school. By offering ongoing quality education locally and deeply grounded in IQ and led by Inuit, learning in ways constitutive of well-being and cultural pride are possible. To develop such an infrastructure and network among practices to exchange ideas about what works, additional resources are needed. More effort has to go into local capacity development and leadership, and into curriculum development that is place-based, like the Arctic Sea Ice Package developed by Arctic Eider. That way practices, pedagogy, and resources, grounded in intergenerational relations, will emerge that respond to current local needs (e.g., Inuit need to be recognized and supported for the monitoring of their environment which has important immediate implications such as the sharing of results in a timely manner to ensure local well-being, positive mental health, and food security, despite daily challenges due to climate change). Moving from projects to programs that sustain themselves over time, valuing navigations among epistemologies (Inuit and Western), and solidifying programs that work are some of the proposed next steps.

Third Section

PART A – THE CONTEXT OF THE STUDY

Problem Statement

Studies on school perseverance in Inuit Nunangat have noted educational opportunity gaps that persist for Inuit youth and young adults. At the same time, there are many unique opportunities and projects that emerged in recent years led by Inuit and their communities, responding to community concerns while also reducing that opportunity gap, and contributing to self-determination and the resurgence of culture. There is a need to document the richness of such informal educational opportunities and environmental stewardship programs and the complementary role these “invisible learning spaces” play in the lives of indigenous youth (Kral, 2010). They offer insights into the kind of radical change Kirkness (2013) calls for and refers to as “our peoples’ education”, a kind of education that comes from looking “within ourselves, our communities, our nations, for ‘the answer within us’” (p. 16). We contend that Inuit-led community programs that are culturally anchored and place-based essentially recreate the kind of “informal intergenerational and situated learning characteristic of traditional knowledge transmission” (Tulloch et al., 2012, p. 1) and are key to develop indigenous ways of knowing and being in ways Inuit have always known to be true or Inuit Qaujimagatuqangit (IQ). They contribute to the rebuilding of relations among children, youth, family and community that colonisation of the North and the introduction of Western Schooling weakened. The goal of this project is to describe Inuit led programs in Inuit Nunangat and their role in the making of a human being or *Inunnguiniq*, and contribution to lifelong learning and perseverance. In doing so, we challenge Western notions of learning and perseverance, and show what a reading of the educational potential of these programs, grounded in what Inuit have always known to be true or IQ, can make evident (Karetak et al., 2017).

Context: Inuit-Led Learning Spaces in Inuit Nunangat

This project builds on prior work that has explored the educational contributions of community-led non-formal literacy programs, youth programs, and environmental stewardship, as we briefly summarize here.

Non-formal Educational Programs

The Nunavut Literacy Council offers a wide range of non-formal programs such as land camps, community sewing, traditional arts and tool-making, all with a focus on literacy and cultural practices and understood as promising models for locally meaningful and managed programs that can contribute to community well-being and the resurgence of Inuit culture and language (Tulloch et al., 2012; 2013; 2017). For instance, the *Miqqut Project* focused on the educational value of five non-formal cultural programs. The report that followed, documents concurrent cultural, literacy and well-being outcomes, pointing to the value of non-formal programs in supporting youths’ and adults’ holistic development. Effective programs do so through “learning that addresses participants’ perceived needs; hands-on learning; relationship, respect and safety; and addressing the whole person” (p. 59), building on the creativity and interests the participants bring with them to the programs. These programs are understood as key to support the Government of Nunavut’s goal of *ilippallianguinnarniq* or engagement with lifelong learning (Tagalik, 2012). While effective programs seem to target specific skills, they also contribute to the development of confidence from skills. They are experienced as safe places for intergenerational exchanges, building on interconnectedness through relationship, caring and respect. Given the programs grounding in Inuit ways, they naturally “culminate in wholeness and well-being” (Tulloch et al., 2012, p. 6). Effective programs also often have low instructor-learner ratios which Tulloch et al. (2017) found key for breaking intergenerational gaps and

building safe spaces for relationship building between youth and elders and the confidence to reach out and ask for help from elders when needed. Language learning happened through culture and the arts, by sewing and being deeply engaged in projects that are meaningful to its producers with literacy being deeply embedded rather than being the explicit object of instruction. The project, *"What about the men?"* (Tulloch, 2015), gave voice to indigenous male role models who talked about learning, work and well-being yet also challenges and barriers and ways to overcome those. That study hinted at the need to broaden the notion of learning and of work, both of which imply a range of pathways and opportunities. The report calls for learning programs and workplaces that are community driven by northern indigenous men, and that create opportunities to mentor each other, in conjunction with integrated healing programs and thereby support the affirmation of traditional values and skills.

Youth Programs

The circus collective *Artcirq*, began in the community of Igloolik, Nunavut in 1998, and is an example of a youth program committed to bridging traditional Inuit culture with modern art (Lemaire et al., 2016 & 2017). The program offers rich opportunities for youth to express their creativity through performing arts, music, and video. The co-created performances deeply grounded in a blended approach of Inuit traditions and modern cultures are shared across the globe through diverse media. A case study of the program led to the identification of three key dimensions: 1) the opportunity for youth to discover and understand their own strengths and develop them further and experience success; 2) the opportunity for youth to develop a sense of belonging, with the program becoming a second family to them and contributing to their well-being but also well-being of their community; and 3) the opportunity for youth to experience and take pride in being Inuit, given the programs blended approach and locally grounded leadership. Through the use of Inuktitut but also through engagement in local cultural land-based activities and hunting trips, next to international travel for performances, youth have multiple opportunities to "live their culture" and to reconnect with values and ways of knowing and being that are empowering to them and their families.

Linking artistic expressions to wellness is also central to the program *Nunavut Hitmakerz*, designed to empower Nunavummiut through an offer of career development opportunities through the arts and engagement in collaborative song-writing, music production, and multimedia (Simonsen & Fraser, 2017). From 2016¹ onward, the program offered music workshops to youth in some communities, in conjunction with community events and concerts by its leaders. To write and perform music in Inuktitut was experienced as empowering by youth, many of whom found ways to express pride in being Inuk through music and song. The program is committed to give the confidence and ability needed to youth to become the next generation of musicians (e.g., Inuk artist Angela Amarualik).

Multiple community-based research and filmmaking projects and programs have also become instrumental in rebuilding relations between youth and elders, to reconnect with culture, and to tell stories of the past in ways meaningful and pertinent today (Kassi et al., 2017). A project in the Yukon, implying a partnership between the Arctic Institute of Community Based Research and the Kluane First Nation, offers a rich example of a community effort devoted to the development of a food security strategy, that then resulted in the film *Remembering our Past, Nourishing our Future* (Butler et al., 2018). Youth received training in data collection, photography, and filming in ways to then author the film (integration of archival photography, storytelling by elders of food practices,

¹ Kelly Fraser, one of the founders, is an acclaimed singer-songwriter, who often blended Inuktitut with English in her pop and hip-hop style music. She was born in Sanikiluaq, Nunavut. Unfortunately, she passed away on Christmas eve in 2019. We share a tribute to her program in memory and deep recognition of her work and advocacy.

results from contamination studies, etc.). Co-learning between elders and youth led to remembrance, reconnection and revitalization and the building of youth capacity in pursuing community driven research and blending traditional and modern knowledge.

A home-grown coding program, *Pinnuaq*, originally launched in Pangnirtuq, Nunavut, has also become accessible to youth in many communities through partnerships (Tabish & Oliver, 2017). Through video game creation, youth develop skills in mathematics, computer programming, engineering, and physics. The program favors “a creative and digital ‘hands-on’ approach. Youth trainers in communities work directly with youth, often in Inuktitut and locally relevant ways, in spaces available at schools or in the library. To build a network among participating communities and its trainers to exchange project ideas, curriculum, and other resources is a goal in the making.

There has also been a growth in Inuit-led initiatives that bring together land-based activities and wellness (Healy, 2017). For instance, the program, *Aullak, Sangilivallianguinnatuk (Going Off, Growing Strong; GOGS)*; Hackett et al., 2016; Hirsch et al., 2016) in Nain, Nunatsiavut, was developed over the years 2010 – 2013 by a group of community leaders, offering a multitude of activities to youth, centering on an integration of hunting and cultural land-based activities with arts and crafts, while also addressing food security and community well-being. The goal of the program is three-fold, to support: 1) the physical, mental and spiritual health of youth; 2) rebuilding social relations between youth and the community; and 3) the passing on of land-based and harvesting knowledge by experienced hunters in the community. These goals are met through land-based trips with volunteer harvesters from the community and through community-based activities to build connections among youth, program staff, community members and elders (e.g., distribution of food to community; construction projects; movie nights, etc.).

Environmental Stewardship and Community-Based Monitoring

Inuit have always been stewards and guardians of their land. Today, environmental stewardship and community-based monitoring are the terms often used to refer to the collaborative work between local knowledge holders and scientists that blend Traditional Knowledge with Western Science to address concerns to the community. It can imply the monitoring of food security issues, water quality, place names, ice, etc. (e.g., Carter et al., 2019; Henri et al., 2020; Robertson & Ljubicic, 2019; Wilson, 2018). Typically, “community-based research emphasizes ‘a robust level of community involvement that (ideally) leads to the coproduction of culturally respectful, relevant, and empowering knowledge’” (Carter et al., 2019, p. 386). Johnson et al. (2016) also note multiple educational benefits of such collaborations, such as increasing the capacity for local “stewardship and resource management”, “knowledge co-production and adaptation of technology, supporting the transmission of Inuit ways of knowing from elders to youth, offering opportunities for community members to spend time on the land, resulting in information pertinent to local communities, offering “tools for compiling observations so that they can be shared easily with decision-makers beyond the community”, opportunities conducive to “network building among communities, CBM practitioners, and governments”, long-term vision of trends in light of local ecosystems, while “facilitating community adaptation and resilience to current and future change by equipping residents with tools to document and share observations” (Johnson et al., 2016, p. 14). Yet, a recent review of monitoring programs in the Circumpolar North led to the identification of few truly community-led and community-based programs that holistically incorporate health and environment issues or that use locally appropriate or useable technology (Kipp et al., 2019). Most programs were community-based but not community-led. In this project, we focus on the latter.

From Inuit-Led Programs to Perseverance and Lifelong Learning

In sum, we take for granted that education is not simply the role of schools, but instead, a community endeavor, implying the family, community, out-of-school programming, and other relations and contexts (Karetak et al., 2017; NDE, 2007 & 2008)). Once situated in this manner, the role of education has to be understood in terms of its contribution to the creation of an able human being or *inummarik*, who can act with wisdom – *isuma* - in relation with others, the land and environments, and spirits. As such, the process of making an able human being, or *inunnguiniq*, is at the heart of education. It is expected that an able human being would have “the necessary survival skills (with a shifting definition of the term survival in today’s north), a strong sense of wellbeing, and have the respect for the interdependence of the family/community/group” (NDE, 2008, p. 14). It is not about producing able individuals “who know” but instead, support the development of relational forms of knowing *through* relations (Healey & Tagak, 2014, emphasis added). As such, relational knowing emerges from and is tied to embodied physical, emotional and spiritual relations with the land, environments, the creatures on the land, as well as with others in and through families and communities. Learning is not about the accumulation of knowledge or about the individual who becomes an expert and can turn that expertise into individual economical assets. Instead, education has to support learning that is applicable, relevant and meaningful and as such, can contribute to the well-being of lives, families, and communities. Lifelong learning is also very demanding given the many skills it implies, and only possible if driven by high expectations. It implies the ability “to think in this deep, deep thinking manner” and the ability “to seek solutions and work collaboratively with others” [Tagalik, Interview 2016]. Central to *inunnguiniq* is also the idea that each child comes into this world with certain dispositions and aptitudes for learning, which means that “you’re becoming as skilled and capable as you can possibly be in the areas that interest you and where you have aptitude so that you can be at the level where you can actively be contributing those skills to improving the lives of people around you. Hence, children need to be given opportunities to develop the kind of building blocks needed that help them move forward on their learning continuum, while we as educators have to hone in on their strengths to create empowering opportunities for, and with, youth.

Research Objectives: The following three objectives drive this study:

1) Documentation of Informal and Nonformal Educational Practices, and 2) Community-Based Science Research:

1. Document the kinds of activities these informal and non-formal programs support and that participants see as key to a holistic vision of lifelong learning and Inuit education.
2. Joint-study and identification of dimensions and strategies of the programs that are understood as closely tied to successful learning journeys of its participants.
3. Study and identify dimensions that make these programs effective within the community.
4. Explore together the role partnerships play in making these programs effective.
5. Joint exploration and documentation of how these programs contribute to and support community well-being and the blending of Inuit and Western ways of knowing and being.

3) Stories of Lifelong Learning Pathways:

1. Develop stories of lifelong learning pathways with Inuit from our projects.
2. Identify and discuss transitions and lived challenges at different moments in these shared stories and explore their implications for Inuit Education.
3. Address the challenges of blending of Traditional and Western Worldviews.

PART B – SOLUTIONS AND NEXT STEPS IN LINE OF RESEARCH RESULTS

Education, Health, Inunnguiniq and Lifelong Learning

It's all about 'creating locally grounded and supported opportunities' for 'learning as it applies to the real world' next to engagement with lifelong learning or ilippallianguinnarnik

1. Who Is the Research For?

The study speaks to Education in Inuit Nunangat and has important implications for both, the formal educational system in place, as well as community-based initiatives managed through the communities, environmental stewardship programs and community organizations led by Inuit and their associations. The project is also of importance to scientists and Inuit organizations committed to educational outreach and environmental stewardship. The curriculum that evolved from such work is of importance to educators, curriculum developers and anybody involved in educational outreach in Inuit Nunangat, while it could also be of importance to the education of Qallunaat, supporting their understanding of what is at stake in terms of climate change, cultural resurgence and reconciliation.

2. Results

Enhanced Inuit Control in Education & Grounding in IQ

"Thriving communities" has emerged as an alternative framework to describe wellness in Arctic communities (Healey et al. 2019), and distances itself from studies in education grounded in Western paradigms. In our project, *inunnguiniq* became the key notion that helped us understand the educational implications of the programs we explored and their contributions to lifelong learning through a grounding in a holistic worldview and through IQ. Only by grounding the study in this manner could we understand the richness and complexity of the programs and their complementary role to schooling, but also family and community, in youths' becoming a human being.

We also had to understand education and the making of a human being as it used to be, prior to the introduction of formal schooling and a sedentary lifestyle in order to fully grasp differences between educational programming grounded in Western epistemologies and led by Qallunaat, often transported to the North from the South with good intentions, to make more opportunities available to Inuit youth, while the ongoing colonization such practices create often escape good intentions (Berger, 2009). As noted in the introduction, that practice renders invisible the many programs that do exist, and that are Inuit led, and that have emerged in light of local needs and concerns, articulated by elders and communities. Deeply grounded in a holistic worldview, these programs are about the resurgence of culture, language and spirituality, yet also about the rebuilding of relations that had been broken among generations and between Inuit and the land, and that still are, given ongoing colonization. As other indigenous educators have noted, there is an urgent need to better understand such locally unique Inuit led initiatives and to find ways to evaluate and understand their contributions locally, through a reading of their contributions deeply grounded in a holistic viewpoint or what Inuit have always known to be true or IQ. In fact, Johnson and Nelson-Barber (2018) call for local research investigations pursued by communities, to establish whether innovations work locally, given the vast diversity of needs. Building on case studies of indigenous-led interventions by Diné (Navajo) educators and another example from Hawai'i, they underline how the unique local contexts make for needs that cannot be met by a one model fits all approach. This project makes evident the value of locally developed educational programs that respond to local needs and concerns and that are deeply grounded in IQ and thereby contribute to lifelong learning and

inunnguiniq. They are guided by indigenous understandings of learning and becoming over time and valorize cultural ways of knowing, becoming, speaking and learning.

Health, Community Well-Being, and Education Need to Be Understood Together

Once education and lifelong learning is understood through IQ, the tight connections between health, well-being and education become vividly apparent. It also makes evident the challenges the communities face in light of climate change and how important education is to be prepared and take action. In that sense, community-led programming is extremely powerful as it can be quickly put in place to address questions and offer answers (see examples from Environmental Monitoring Programs in Arviat and Pond Inlet). It also makes the curriculum that the Arctic Eider Society prepared that pertinent, a curriculum that offers youth with locally relevant information to become the stewards of the land in yet other ways, working as a complement to programming we documented in Arviat, like the Young Hunters Program and Environmental Stewardship.

At the same time, we tried to show how the programs evolved over time and the manner they became transformed in light of new needs that arose. As shown for instance in Arviat, youth also had to become message carriers and ways had to be found to share the information with the community, leading to the add-on of a media group and filming of the activities the youth were engaged in and that could then be shared through the community TV station, or by soliciting the help of the Arviat Film Society, when needed.

Importance of a Blended Approach of IQ with Western

All settings and programs valued a blended approach, grounding their programs in IQ while supplementing it with Western ways of knowing, doing and making available to youth cutting-edge tools and technology, and thereby prepare them well for the future. As discussed, that is challenging in the more formal education system where few teachers are Inuit and expertise in IQ may be somewhat limited and for political reasons, a Western grounded curriculum is still in use. Yet, as discussed, some teachers have found ways to co-teach with Inuit and it is clear from those examples that by involving other members from the community and think of alternative certification methods, strides could be made on that end for Inuit to be able to pursue an education that at least in part is more grounded in their culture and respectful of their culture and rich ways of knowing, their language, and their history and future aspirations. It might be too that each community has to find a form of a blended approach that works for them locally.

Education is about Community and Healthy Human Relations

The project makes evident the manner programs are self-sustaining as youth and adults learn from each other. The projects also made evident the need to rebuild relations between generations and show how some youth found new ways to interact with elders and rebuild those relations, while elders were proud of the work youth accomplished. We talked little about parents, but they also noticed change due to program participations. Taken together, it shows how important it is to work from a relational perspective and find ways to also reach out more to parents through programs that are deeply grounded in values and beliefs of IQ.

In addition, given the programs' grounding, they worked from a strength-based approach, taking each youth where they were at and helping that youth discover and work on their strengths in ways empowering and meaningful to them. It is a positioning of youth and their families not as problems, but as having assets to be developed further, through lifelong learning. While deficit views of youth and families have a long history in education, many strides have been made to move away from such a grounding. Yet more still needs to be done and can be done in ways ITK calls for. The literature review of other Inuit-led programs offers rich examples of the vast variety of opportunities that have been created, making accessible to Inuit unique opportunities that are complementary to schooling. Yet,

as is, not all communities are equally well-served and more work needs to go into creating a more robust network of such Inuit-led programs and the financial means to also build the local capacity needed to support the training of mentors locally. In that manner, lifelong learning could be better supported and be made accessible to more youth.

Capacity Building through Partnerships

Partnerships assumed by Inuit who partner with allies, marked in some manner most of the programs we documented or certain projects they pursued. It led to the availability of additional resources and supported local capacity building. As suggested by Carter et al., (2019), community-based partnerships are crucial to community capacity building when deeply grounded in respectful relations. They note how important it is to take the time needed to form personal friendships and to work together in all steps involved in the co-creation of knowledge. The Arctic Eider Society has been actively involved in such work from which the curriculum we described in this project emerged. The Water Stewardship project in Pond Inlet is an example of a partnership with ARCTICConnexion, which we tried to document in part and build on, gaining insights into how such initiatives can contribute to lifelong learning and youth and community empowerment. Most important is their contribution to local capacity building and self-determination. As discussed by Carter et al. (2019), there has been a shift from participatory to partnership projects. As shown in this project, youth play a crucial role in such partnerships and need to be involved, as it helps them understand their strengths and interests. Participation can also become a stepping stone to then pursue formal training in a program like the Environmental Technical Program managed by Arctic College, which then gives them additional tools to build the capacity needed to become the stewards of their environment, especially when supplemented by local experiences of hunting (provided through their families or programs like Arviat Young Hunters) and cultural practices that support relations with the land in ways deeply grounded in IQ. Partnerships can also make training in Inuktitut possible. That is crucial for understanding, but also the resurgence of Inuit culture, including the language, which not all youth have access to at home.

Research as a Tool to Social Equity in Inuit Nunangat

In its National Inuit Strategy on Research (2018), ITK challenge the kind of relationship that has marked for too long the relationship between Inuit and research. Through this project, we aimed to respond to an urgent need to document Inuit-led community programs and their educational implications which are still too often silenced in discourses about educational reform in Inuit Nunangat. We saw this as an opportunity to decenter current narratives about educational failure and question Western notions that are typically applied to describe Inuit education that are highly problematic and give no justice to the richness and importance of Inuit-led programs in the lives of so many in the communities we worked with. We understand that this project may help inform future policy decisions in education but also policy design in light of environmental monitoring, in the form of budget allocations to communities for instance, or in rethinking education and its inherent process of accreditations that has never recognized the rich and important knowledge bases of Inuit and their communities.

As is, there are many scientists with long histories of work in the North that have, in many instances, "by accident" come to contribute to local capacity building and education. While some of them document their work with youth and communities, those stories are not necessarily explored by people in education. Similarly, the kinds of youth programs we described in the literature review are often noted or even supported by researchers working in the field of social work, addressing mental health and suicide prevention in new ways, yet too often, that work is not considered when policy decisions are made in education given transdisciplinary barriers. We believe that dialogue across those divisions are

urgently needed as these divisions are meaningless once we understand IQ and lifelong learning as deeply grounded in a holistic worldview. We strongly believe that research can be a tool for creating social equity in ways envisioned and called for by ITK, but only if we engage at a deeper level with indigenous epistemologies and methods and if partnerships and research are Inuit led. Hence, capacity building is an issue we have to seriously address at many levels, with increasing Inuit presence yet to get there, we also need more programs as the ones described in this project so more youth have opportunities to learn about the land and their communities and develop the skills and knowledges needed to take on a leadership role in the future.

3. Limits of Project

One of the strengths of this project is the grounding of the project in deep relations with the communities and key allies in each community. We presented preliminary results at different venues and in the communities, and are in the process of collaborating on the dissemination of the results. The project is also descriptive and aimed to tell stories in ways things are, deeply grounded in respectful relations and humility. Grounding the work in Indigenous methods has given us guidance in this process (Wilson, 2008; Annexe 2.4.). At the same time, the cost of travel and distance among members of the team made meetings in person not always possible and stays in the communities were also limited in time given other work commitments (e.g., teaching and supervising students in University) and family constraints which we see a limit as we could not build relations with youth as deeply as we would have liked. In this project, we also sampled programs in three different settings but would have liked to expand the scope to others in Nunavik. While we observed the implementation of the AES curriculum in some communities in Nunavik, it would be interesting in the future to include other programs in other communities and work more closely with the youth and have them become more actively involved in data analysis and dissemination, in different educational venues. Through a sampling of more communities and programs, some also from other regions such as Nunavik or Labrador would have strengthened our conclusions. Still, we believe the stories that emerged are valuable first steps in the right direction and can tell us much about education, perseverance, and lifelong learning, understood through *inunnguiniq*.

4. Some Implications for Education

1. Create More Opportunities for Lifelong Learning

- ◇ Capacity building may take a different form in each community, yet the building of networks among programs, can strengthen capacity building and the joint work on guidelines and resources and sharing of those resources.
- ◇ Need to have more local resources, materials and space to support the creation of more opportunities that are locally grounded and relevant for youth.
- ◇ The need to understand education holistically to overcome divisions between formal, nonformal and informal education.
- ◇ Access is not always well coordinated with youths' schedules and needs.
- ◇ Need to get a better sense of the learning ecology in place in each community and then build on it by enriching opportunities or developing new ones.
- ◇ Need infrastructures for programs so they can be housed in culturally safe and accessible spaces (programs in schools may not be understood as culturally safe by all youth or young adults; location is important)

2. Revisit Normative Logic from School to Employment

- ◇ Western models of education have been deeply grounded in a normative logic of formal education, beginning with schooling that then is understood to lead to employment. As shown, once grounded in IQ, that logic falls apart at many levels:
 - a. What is learned in school is not understood as valuable if it cannot be applied in real life.
 - b. A distinction has to be made between education and learning. If students are not in the formal educational system, it does not mean they are not learning.
 - c. Once this distinction is understood, it makes evident the need to think of multiple possible pathways that build on strengths children bring with them to the situation. As is, educational venues want youth to fit into their model, a one model fits all idea.
- ◇ Capacity building may take a different form in each community, yet by building networks among programs, can strengthen capacity building and the joint work on guidelines and resources and sharing of those resources.
- ◇ Need to have more local resources, materials and space to support the creation of more opportunities that are locally grounded and relevant for youth.
- ◇ The need to understand education holistically to overcome divisions between formal, nonformal and informal education.

3. Promote A Movement from Environmental Stewardship Projects to Programs

- ◇ Need year-round funding/base salary for leaders. Many environmental stewardship programs are project based, and funding of personnel is challenging.
- ◇ Youth often receive a salary through summer employment programs and academic standing, which limits access to such opportunities for students who may be in most need of a positive learning experience and new relations.
- ◇ Monitoring programs as the ones we described implied internships in laboratories in Partner Institutions and Universities, as well as participation in scientific meetings. Yet, to cover associated travel is not always trivial.
- ◇ Youth need opportunities to better understand the governance structures in place of the land and its resources, as well as access to a curriculum as the one proposed by AES, that blends Inuit Ways with Western Science in respectful ways. Yet, that curriculum also makes apparent problems with curriculum development approaches. As far as we know, they are rarely led by Inuit or community concerns. Consultation models still too often dominate, which are clearly inappropriate.

4. Value of Navigations Among Epistemologies

Much research and policy in education engages in epistemic violence which then further supports colonization. Educators have to yet develop the humility and sensibility to question fundamental notions that have been used to describe and assess education and perseverance in Inuit Nunangat.

- ◇ We tried to show, perseverance and educational success need to be understood in ways meaningful to Inuit. We tried to ground our reading of perseverance in *inunnguiniq*, which then helped us to offer a more nuanced narrative of education and offer a rich description of the programs' contributions to community well-being and lifelong learning. It also helped us question linear visions of perseverance. There are important take away lessons for all of us who engaged in these navigations among epistemologies; it is a richness, yet as is, we ask primarily Inuit to navigate Western epistemologies. It should become part of our educational systems and an educational goal to immerse youth and adults in such navigations.

5. Attend to Distinctions between Education and Learning

6. Solidify Programs that Work; Build Networks to Share Resources

PART C – METHODOLOGY

An indigenous research approach guides the study, implying in this case the pursuit of a research agenda set by Inuit through relationship building among the team (researchers, community members, families, adults and youth) based on principles of reciprocity and responsibility “that form a mutual reality” (Wilson, 2008, p. 71; Annexe 2).

Context of the Study: Descriptions of Programs and Communities

Setting 1: Arviat, Nunavut. A) The **Arviat Film Society (AFS)** is a youth-driven program offering digital media literacy while also contributing to the development of many skills to become future leaders and innovators. Participants in AFS range in age from 13 years on to adulthood, with anywhere from 10 to 30 participants.

B) The Ujjiqsuinig Young Hunters Program (YHP) is delivered by the Aqqiumavvik Society (Arviat Wellness Centre) and designed to develop sustainable harvesting practices in youth between the ages of 8 – 25 years old. Guided by experienced elders and instructors, youth engage in local hunting activities and monitor wildlife, weather, water, ice conditions.

C) Youth Environmental Monitoring Program (see also Arviat Goes Green & Climate Change Adaptation; YEMP) grew out of a collaboration between Aqqiumavvik Society (Arviat Wellness Centre) and ARCTIConnexion, and led to the experimentation of growing local food in a greenhouse, while it also supports youth training in monitoring skills, encouraging youth to observe and respond to climate change, serving youth from 8 – 18 years of age.

Setting 2: Pond Inlet, Nunavut. Expanded Leadership to Study Water Quality. The water stewardship program grew out of a collaboration with ARCTIConnexion, leading to the training of youth in water monitoring practices on the land and in the laboratory, serving youth and young adults.

Setting 3: Arctic Eider Society (AES) is a registered Canadian charity based in Sanikiluaq, Nunavut, created in 2011. Through research, education and outreach, and stewardship programs, AES contributes to local capacity building and self-determination in addressing environmental change. The Arctic Sea Ice Educational Package for high school science, that emerged from that work is the focus of this study.

Data Collection & Analysis

An ethnographic case study was pursued of each program, entailing visits of each community and program, engagement in dialogue circles with instructors, mentors, and youth from each program (filmed and audio) and follow-up exchanges with key informants from each setting, as data was analyzed, to ensure “relational accountability” (Wilson, 2008), and a grounding in IQ. Overall, interviews of 34 adults; 2 elders, and 16 youth were analyzed (Annexe 2.), in conjunction with fieldnotes, notes from informal conversations. Analysis was guided by IQ documents that had been developed by the Government of Nunavut (NDE, 2007, 2008). In the case of the curriculum developed by AES, we pursued a content analysis of the curriculum (28 modules; 5 online homeschool videos) and interviews of key informants involved in its development. Analysis led to key dimensions that made the programs and curriculum effective while resulting in rich stories about program and project evolutions, forms of participation, and lifelong learning (Annexe 3.1. – 3.5.). Data also led to the development of six case studies of lifelong learning, offering rich insights into key dimensions that matter over time (See Annexe 3.6. & 3.7. for two stories of lifelong learning). In this report, we offer a synthesis of key dimensions that emerged from these multiple data sets and analysis among the members of the team and the community.

PART D – RESULTS

Part 1: Educational Implications of Inuit-Led Programs

In part 1, we respond to two project objectives: 1) to document informal and nonformal educational practices; and 2) to document community-based and led research.

D.1. Contributions at a Global Level

Vision of Education that Programs Embody

I feel very strongly that if a young person is making a commitment to pursuing their goals, to try to pursue an education, then as educators it's our responsibility to support that person and provide opportunities so the young people can meet the goals they set for themselves. [S. Tagalik, 2014]

That vision is not what drives most education today. Instead, we typically ask children and young people to fit into educational systems that were created for them and assume they will respond well to the needs and goals learners bring with them. It can be a very disempowering experience, especially in the case of education in Inuit Nunangat where children and youth often feel caught up between two contradictory worlds.

Kawagely wrote in 1995 in the context of Yupiaq in Alaska that "schooling leads to disillusionment and alienation from the Native ways while instilling values and aspirations from another world that is out of reach" (p. 99). Our data suggests that this tension prevalent and experienced as a struggle. At the same time, not all youth we worked with had access to IQ through activities in their families (food practices, land-based activities, language, elders, stories, etc.) and some felt lost. For this reason, these programs came to play a crucial role. As one instructor mentioned, you cannot teach IQ, it happens through the land, through language, through the rebuilding of relations in ways the programs we studied aim to do and as he noted, "you have to feel it" to understand it.

According to IQ, education needs to focus on the application of knowledge, as knowledge for its own sake is useless. "The whole point of learning something is to apply it in your life to improve your circumstances" [Tagalik, 2016]. Hence, it is keen observation and practice that the Young Hunters Program encouraged, for instance, which mediates the development of the kind of knowledge needed to then become a hunter who monitors the land and lives in harmony with it, while being able to contribute to the community good through hunting and the sharing of country food with the community, a practice that then also ensures intergenerational relations and communication, keeping Inuktitut alive.

Western models of education also rarely work from a strength-based approach which is at the heart of IQ. The programs described in this study take for granted that all participants arrive with some strengths that have to be matched and nurtured, and if done so, participation can lead to growth and further development that then drives the seeking out of new opportunities and makes for the kind of lifelong learning that constitutes the making of a human being or *inunnguiniq*. As noted by one of the leaders of the Arviat Film Society, "its' really about empowering them to explore and discover what they wanna do with their lives, rather than have a pre-programmed system telling them what to do, and how to be and where to go" [J. Bell, 2016]

The ways of learning at the heart of the programs also embody different IQ principles. IQ learning itself is understood as a continuous or cyclical process of observing, practice, feedback, reflection and personal improvement. Implicit in this learning model are the IQ principles of *pilimmaksarniq* or becoming skilled and capable so that you can use your skills to improve the lives of those around you, *qanuqtururanganiq* or the ability to be resourceful and think deeply to seek solutions and better ways of operating or making good decisions, *iqqaqqaukkaringniq* or being innovative and creative technically so that you bring the best of every resource at hand to bear in a given situation.

Pilimmaksarniq – becoming skilled and capable is always done in a mentorship/apprenticeship way of learning where those with expertise help you develop your skills. You are then expected to practice continually in order to build your capacity with these skills and to experiment through trial and error to continually improve of your skills and knowledge until you are recognized for mastery in the field of skill you are pursuing.

For Inuit, all learning happens within the context of *ilippallianguinnarnik* or engagement with continuous, progressive, lifelong learning. We observed such engagement by youth in Arviat, who participated in Arviat Film Society but also others offered by the Aqqiumavvik Society, over time. Participation in programs is also about giving back. Hence, once youth have experienced mentorship in one program, youth may become mentors in another program. This is how the concept of *pijitsirniq* or serving to meet the needs of others is applied in the continuous learning context.

Programs Contribute to Closing the Opportunity Gap

The programs offer unique empowering opportunities to youth. They were created in response to identified needs in the communities, and driven by the aim to close the opportunity gap that exists for youth in Inuit Nunangat. The programs emerged from the recognition that they play an important complementary role to schools. The programs also help respond to goals of youth, such as wanting to speak Inuktitut and learn more about their history, the land, and traditional food practices, for instance in the case of the programs in Arviat, or the doing of research in the case of the water stewardship project in Pond Inlet. Some youth received school credit for participation in these programs, which is another way to ensure the program's contribution to lifelong learning, as it made graduation possible for students who struggled in a formal educational system far removed from their cultural identity and practices.

In terms of the Arctic Sea Ice Educational Package developed by Arctic Eider Society, it closes an opportunity gap in terms of science education in that it offers locally relevant science to Inuit to ensure children and youth have the knowledge needed to become stewards of the land, tomorrow, and in ways wished for by the elders. It can contribute in important ways to Inuit led environmental stewardship and leadership. In light of the Arviat Film Society, one of its leaders noted how we also have to give youth time to explore opportunities, as "each one of them is unique" and needs to build on their strengths. As such, the programs are "enabling spaces" (Battiste, 2013), offering youth with a vast range of opportunities, skills and new roles, both as keepers but also knowledge builders. In the programs in Arviat, youth not only developed new skills through observation and participation, they also turned these into video documentaries, pictures and other artefacts to share with the immediate community, leaving traces of projects that can then guide local action and change.

Education Through/By the Community; A Continuum of Relations

I think, the really exciting thing about the Young Hunters Program is that it's so mutually sustaining. We have all these young kids who are keen on the program and their energy and keenness is, you know, continually motivating the instructors. We have the elders, who contribute their knowledge and experience to the program. That is revitalizing their role as elders, as, you know, advice givers, as experts in the community. And then we have these young people and it's their opportunity to train others, to contribute their knowledge to the common good to improving their community. So, all of the cultural system that would have been in place falls into place in this program because it creates these interactions of relationships and relationship building and engagement with a sense of a common purpose, and a sense of shared expectation for improving the lives of others. [S. Tagalik, 2016]

The programs essentially recreate intergenerational relations that have been broken through schooling and colonisation. The strong relational ties that develop through the programs help sustain youth beyond the programs and also help them reconnect with family. The rebuilding of relations is a key component of the Young Hunters Program, where youth meet with elders, hunters, and learn skills from community members. It led parents comment on how youth now speak more openly with their fathers about hunting or more regularly visit their grandparents. Child rearing for Inuit happens through support received from a strong and complex sets of relationships. These networks were diminished with colonization (Greenwood & Lindsay, 2019; Kral et al, 2014), but through relational-based programming deeply grounded in the community, the Inuit principle of *Inuuqatigiitsiarniq* or respecting others, relationships, and caring for people, has been restored in part.

Rebuilding Relations with the Land through Hunting and Stewardship

Avatimmik kamattiarniq is a collective responsibility for all Inuit to act as environmental stewards and respectful guardians of wildlife and the natural world. Physical health and cultural connections to the land are maintained in part through 'country food' but also through that collective responsibility to take care of the land and "reciprocal nature of healing the land and healing the people" (Greenwood & Lindsay, 2019, p. 83). While hunters are the maintainers of the land, land, health and knowledge are tightly interrelated and as such, both have to be nurtured and protected, hunting practices and environmental stewardship, in support of nourishing *ujjiqsuiniq* and *silaliriniq* or environmental awareness. The land, water, ice and well-being are interrelated within a holistic perspective implying that "to occupy a place required that we be active in fellowship and stewardship with place" (Kalluak, 2017, p. 57). How this comes through is well articulated by Kukik Baker, founder of the Young Hunters Program (YHP):

No matter what you go through, if you feel like you are having a hard time or you can't think clearly, go out on the land and the land will renew you and rejuvenate you, and you'll be able to start to think clearly and work through whatever problem you are going through. The land is very much a healer for us. [K. Baker, 2016]

Many youth participants referred to the healing they experienced by being on the land. It also did not escape the instructors, as Hunter Tattuinee from YHP noted:

The kids we take out, it's... even, you can even tell with their faces, they're happy. Happy to be out, on the land. Away from town, away from anything, worry, nothing, no worries, nothing, just land. Nothing else. That clears their mind. [H. Tattuinee, 2016]

As Greenwood and Lindsay (2019) argue, "indigenous wellness literally cannot exist without the land" (p. 85). For these reasons, *inunnguiniq* is that important, as it implies "leading a child from birth to adulthood by showing and teaching them to be a better person in their everyday lives: to have good relationships with others and good attitudes in every situation" (Angutinngurniq, 2017, p. 69), and with the land.

D.2. Program Evolution over Time: From Local Needs to Community Well-Being

The programs respond to needs raised by elders and the community, and continuously evolve given changing local needs, constraints, and a focus on the future. Central to IQ is the spiral which also offers a vivid illustration of the evolution of the programs over time,

as they respond to local problems and constraints while being driven by future needs (see Annexe 3.3. – 3.5.).

Young Hunters Program: The program responds to issues of food security “young go hunting for the elders and the community”; the program also assesses information and concerns raised by harvesters and provides information back to the community. Youth are being trained as message carriers to engage the community with important information for sustainability.

Arviat Goes Green: Taking advantage of warmer weather due to climate change led to idea to grow food locally, while it was another means to also respond to food security issues. Given its location in the middle of the community, it facilitated dialogue between youth and the community as well: “The greenhouse is right in the middle of town, and everybody walking by would kind of wanna see it, they were so amazed that it was so green and everything was growing so well, when we told them this is soil from Arviat, they’re kind of amazed, almost everybody said: ‘I didn’t know we could grow vegetables.” [N. Lindell, 2016]

Arviat Film Society: AFS is committed to facilitating opportunities while responding to community needs”... to offer youth a safe space to “tell their stories... and to define their own sense of identity from their own perspectives, rather than have other people do it [for them] [J. Bell]

Water Monitoring, Pond Inlet: Water monitoring which implies being on the land can be understood as a form of activism and fight against dispossession, it is about rebuilding relations that had been broken, with the land, with the elders, with Inuktitut and cultural practices.

We wanted to develop a project that would provide us with the opportunity to conduct serious research and answer the preoccupations of our community in a way that would build our skills and knowledge for the benefit of the community. We found out that the best way to achieve these goals was to lead the research ourselves. [T. Anaviapik-Soucie]

D.3. What Makes Programs Unique in the Eyes of the Participants

Blending of Inuit with Western; Blending of the Traditional with the Modern

Since the programs are Inuit-led and community-based, they respond to local concerns and aim to contribute to the common good. As such, they are grounded in IQ. Yet, such a grounding does not exclude the modern. On the contrary, it makes possible a blending of the two that is no longer experienced by the youth as a tension between two worldviews in which they feel caught up. Instead, youth understand that Inuit have always been adapting and taking advantage of new resources that are made available. It is this cultural dynamic that has enabled them to successfully survive such a harsh environment. The need to continually adapt and improve is especially noticeable in the many new technologies that the programs make use of and trains youth to become expert in: SmartICE, marine sonar mapping, SIKU app, GPS etc.

Programs are Mutually Sustaining (Learning from each other)

The rebuilding of relations that had been broken between youth, instructors and elders is also entangled with learning from each other, which then results in wellness and happiness for all involved, making for programs that are mutually sustaining and empowering to youth but also the community:

In Arviat

Yeah, and they always have fun. The kids we take out [with Young Hunters], it’s... even, you can even tell with their faces, they’re happy. Happy to be out, on the land. Away from town, away from anything, worry, nothing, no worries, nothing, just land. Nothing else. That clears their mind. [Instructor, Interview 2016]

In Pond Inlet

The elders told me they were proud, they told me to keep my head up and to ignore anyone that puts me down in that way... I started making them tea, I helped set up their tent for them and I carry a lot of the stuff for them...I felt useful that I could teach someone [the elder] with a lifetime of experience to learn something new into their life [Youth P.]

Telling the elders what I know and what they didn't know, I felt that gap in generations... teaching them about what we are capable of doing nowadays, to study the water, to see what we do, to learn more, they were really interested about it and I guess it felt good for me because I felt useful [Youth M.]

Contributing to the Well-Being of the Community is Empowering, it is Our Work

In Arviat

A community-based project, it feels like it is *my* project, it is our project. Like these people are helping us, train us to do these things, so that we can keep doing this, and then, when researchers come into town, you know, you don't only know one aspect, you do not know only about collecting the samples, you know what to do *with* the samples, you know how to analyze them, you are not just collecting for a researcher [N. Lindell, 2016]

In Pond Inlet

Inuit youth training Inuit youth, that became the spirit of the project. It's about Inuit moving ahead, kind of, it's part of the decolonization process, and it's just great to be part of it ...I'm always envious of people going out on the land to go to work, it's better than people who are stuck in town doing work, it's better... for the psychic [Anaviapik-Soucie, 2014]

The programs all began in the community, are led by members from the community, and guided by questions and concerns from the community, offering answers in a timely manner. The programs bring in partners at times, but temporarily only, to pass on some skills to the participating youth and community members who then build on them and take the programs to a new level:

It's a great feeling that it's ours, that we know that it's gonna stay in Arviat, it's a great feeling being able to tell people we are doing this because elders want it. We film everything so everybody gets to see it all on the local channel. That's a great way to explain, ...seeing all the youth from their community and actually doing the research, they're hearing elders and their knowledge, on the film, it's a great feeling, people understand what's happening and people listen more, they care more because they know their grandparents are on TV, sharing their knowledge..." [N. Lindell, 2016]

PART 2: Stories of Lifelong Learning

Story 1: Learning as Relational and Lifelong – Educational Pathways

- In the case of Arviat, many youth participated in all program activities we documented over time which made us conclude that the programs do address important opportunity gaps, as discussed earlier and as summarized in Annexe 3.14.
- In Annexe 3.6. and 3.7., we share two different stories of lifelong learning. Both make evident the manner opportunities led individuals to discover and build new strengths, giving them new direction to then seek out new opportunities in their near future.
- Both cases make evident the manner the making of a human being is deeply seated in relations with the land and the community, as also summarized in Annexe 3.8. & 3.9.
- Annexe 3.13 makes evident the inappropriateness of the Western Linear Model of Education typically used to evaluate perseverance, a model that does not give credit to the rich lifelong learning many Inuit youth are engaged in, deeply grounded in relations in their communities. The model also makes evident the challenges Inuit still face when seeking a formal education that remains dominated by Western models of educational institutions. At the same time, we show how the programs became a springboard for

many to then pursue the Environmental Monitoring Program offered by the Arctic College. Some students from Nunavut also pursued Nunavut Sivuniksavut in Ottawa. Essentially, *inunnguiniq* also implies the navigation of the Western system, yet through a deep grounding in IQ and tight relations with family, community, the land, language, culture and the spiritual, which these programs seem to do well.

Story 2: From Inuit Led Programs to Place-Based Curriculum

The Arctic Sea Ice Educational Package with its 28 lesson plans, some of which can also be found as online homeschooling videos, emerged from the wish by the elders that children have access to locally relevant math and science: "We need to have math and science, we need to have kids learning these things so they can do environmental research themselves, and we need to build capacity" [J, Kidd, Education Coordinator AES]. "It was sort of like 10 years of collected resources and research, some lesson plan ideas", we wanted to turn "all of this cool research that had happened in the arctic, we wanted to make sure we got it out" [ibid]. While AES relied more on Western Science initially, the aim is a blended approach so "children can use indigenous knowledge in ways useful in the future" [ibid]. The curriculum was promoted through workshops to many classrooms in Nunavik, given a partnership with Kativik Ilisarniliriniq, and will be integrated with a Land-based Environmental Science course, at the upper-level in high school, a project in development. A long-term Northern teacher had this to say:

...this is kind of a dream but it would be nice to have it come from Inuit in Inuktitut. Like the curriculum to be created in Inuktitut and then translated into English and French. That, I mean like I say it's a dream. I think it's quite difficult for that to be a reality but if you are starting from the language as your base I think it's nice. [Interview A, 2019]

The SIKU.org platform and mobile application and winner of the Google.org Impact Challenge, which was launched in December 2019, has become a crucial resource to supplement the developed lesson plans with stories from the land, told and shared by Inuit. In some way it is an answer, in part, to what teacher A refers to as a dream. In this manner, local knowledge has become more tightly woven into the lesson plans (e.g., when talking of food web and seal for instance, linking it to stories about how to cut the skin so you can then saw the *kamik* in ways Inuit have always done).

How to Implement the Curriculum in the Near Future – Some Ideas:

1. Moving Forward through Co-Teaching by Inuit & Qallunaat

- "A colleague of mine had a community member as a **co-teacher** not a teacher trainee that's not the terminology a co-teacher somebody else to be in there with you to work with you. Umm, and the kids loved it and he loved it and I think his co-teacher loved it. [A, 2019]
- A year and a half ago, **I was working at the school, I was a special education technician, so I was working closely with students that needed more explanation, more understanding in Inuktitut**, so that was a good position for me, and for the students. That way, they could ask me what the teacher was asking them to do... [C, 2019]
- **...pis souvent j'fais référence au professeur de culture de *landskill***, qui est l'un de mes amis avec qui je chasse beaucoup. Il vient souvent dans ma classe pis je me réfère beaucoup à lui pour résoudre pleins de problèmes. Donc j'suis vraiment ouvert à cette idée-là, vraiment ouvert à cette idée là parce que quand on arrive au Nunavik, on débarque comme sur la lune là. Quand t'es un blanc... quand tu débarques dans ce genre de territoire là et'es pas conscient de tous les enjeux, qui se jouent de façon journalière là pis y'en a des enjeux. [B, 2019]

2. Integrate it with stories told by Inuit through the Siku online network while also having "Inuit teachers teach Inuit content"

so "ultimately we want to step away from what we're doing and have hopefully helped in mobilizing Inuit knowledge to keep it from being eradicated from policy, to keep it going on

for generations... it is a national treasure, there is so much knowledge that people are willing to share that we could build so much better policies on, and better educational resources that build on it, that's my hope." [J. Kidd]

As noted by Kidd, given her past teaching experience in Nunavik and running many workshops, engaging children and youth in storytelling is an extremely adaptive strategy as it easily works with many grade levels, different abilities and regions. It made the Food Web Unit a particularly interesting.

3. Long-term goal driving curriculum development by Arctic Eider Society: "What we want to do is open more doors", yet it often feels the opposite is happening. In light of Kidd's own teaching experience, what worked well for her was the culture teacher doing the teaching while she was co-teaching, "that's when we all understood each other, there was translation, students helping to translate, co-teachers helping with translation, we could really develop ideas as we were like working together on a collaborative base. Hence, partnerships are key to curriculum development and delivery.

D.5. Key Ideas & Implications for Education and Curriculum Development

"We know our children will have to face struggles that we never imagined but they can still be prepared for these through inunnguiniq". Louis Angalik, 2010

Change from Within: "As indigenous nations, we've been disconnected from who we are as people, from the sources of our strength and our very survival: our land, culture and community" (p. 5). To move beyond that disconnect and engage in resurgence has to come from within through "the re-creation of sound communities, individual empowerment, and the re-establishment of relationships based on traditional values" (Alfred, 2009, p. 60). These programs offer illustrations of possibilities of change from within, empowerment, pride, and a move beyond "dispossession" towards cultural health. The programs and curriculum also underline what culturally relevant education looks like. In 2009, Aylward referred to activities tied to Inuit culture, history and the land as key to improve graduation rates of Inuit and in some communities, youth had options to engage in such activities to gain school credit. The activities complement family, community and school learning in important ways, contributing to lifelong learning in crucial ways.

The programs also support cultural safety and identity, "ultimately, cultural safety is about self-determination, for Indigenous Peoples, which includes defining their criteria for service, institutions, and organizations" (Fast et al., 2017, p. 158).

Relations: The project makes evident the key role of relations, which begs the question, How can we strategically transform institutional relations (School-Land-Community; Indigenous Communities with Universities, etc.) to support the making of a human being or *inunnguiniq*, and thereby support lifelong learning?

Language Revitalization: The programs are illustrative of a form of bilingual education urgently needed to replace current subtractive bilingualism. The co-creation of curriculum, by youth, adults, elders and other community members, is powerful and healing, leading to the resurgence of culture, language and history by Inuit for Inuit.

Blending of Indigenous with Western Ways, starting with IQ: The programs call for a relational System/Blended Vision of Indigenous and Western Ways. As other indigenous scholars have noted, "understanding dynamics of human-nature relations... may prove critical to developing socially and ecologically just and sustainable communities in the twenty-first century" (Bang et al., 2015, p. 311). That blending is also essential to lifelong learning, supporting Inuit's navigation of the larger educational landscape (engage in environmental stewardship locally & globally; pursue careers in the sciences & higher education (Page-Reeves et al., 2019).

PART E – IMPLICATIONS FOR RESEARCH & PRACTICE

Enhanced Inuit Control in Education

- Decision making should be shared to a greater extent as in traditional Inuit culture
- To ensure a larger proportion of teachers are Inuit or long-term Northerners, there is a need for an expansion of community-based teacher training programs and reforms in how teachers are hired
- Improvements are needed in the working climate/culture in schools
- An expansion of innovative efforts that support parents in their interactions with schools are needed

Potential Solutions & Research

- ◇ Build on attempts that have been made in the past to move forward (e.x., IQ curriculum in Nunavut; Build on recommendations made by ITK through community led research)
- ◇ Build on previous work conducted by researchers deeply committed to and respectful of indigenous worldviews (Literature reviews on specific topics)
- ◇ Develop Networks among Inuit-led initiatives to exchange and build capacity across Inuit Nunangat; document what happens in networks of this nature.

Greater Strides to Linguistically and Culturally Relevant Education

- Culturally-relevant curricula should be further developed across Inuit Nunangat
- Land-based activities should be mandatory in schools across Inuit Nunangat
- A greater proportion of class time should be devoted to Inuktitut Instruction

Potential Solutions & Research: Implement models that are working, evaluate them locally and adjust them in ways to make them locally meaningful; be respectful of vast diversity in needs of communities (i.e., importance of locally researching innovations and interventions in indigenous learning communities; Johnson & Nelson-Barber 2018)

Be Vigilant about the Use of Western Standpoints in Educational Research

For education to become medicine, navigations among epistemologies need to be understood as valuable and desirable (Bang)

Potential Solutions & Research: Need to work with communities directly through sharing circles and community-centered approaches to challenge notions typically used in the literature and research (e.g., resilience, Healey Akearok et al., 2019; indigenous health, Greenwood & Lindsay, 2019; Kral et al., 2014; etc.);

Respect indigenous methodologies and research protocols (ITK, 2019); include voices of all (youth, parents, teachers, community members, elders); ground projects in literature conducted by indigenous scholars and respectful allies.

Proper Resourcing of Schools and Communities

- Schools in small communities need all the supports – for both students & teachers – that schools in larger communities have in order for students to thrive; opportunity gaps need to be addressed, and currently non-participating youth brought in.
- Educators need more frequent opportunities to gather with other educators from across Inuit Nunangat to share their experiences.
- Communities need the financial support to create programs as the ones described here; they need on-going financial support
- Communities need space/infrastructure for program delivery

Potential Solutions & Research: Need on-going base funding for programs as described here/call for policy change/local control; build on Inuit Leadership Models (Kitchen Consultation Model, Price, J. 2007: 63); build on research partnership models that work (expand on Carter et al., 2019; Johnson & Nelson-Barber, 2018; etc.)

PART F – REFERENCES

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