

The Nexus Between Aboriginal Program
Development and Leadership:
The Kivalliq Science Educators' Community

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Introduction

My name is Jim Kreuger and I work as a program consultant for the Nunavut Department of Education.

I would like to thank the Council of Ministers of Education for giving me this opportunity to address you today. I am thankful because I feel that I have something worth sharing, but also because in preparing this paper I had the opportunity to reflect on some ideas that I have held for some time.

My topic is the ***Nexus between Program Development and Leadership***. I will present a case for the Kivalliq Science Educators' Community, the leadership they have provided in aboriginal youth science engagement program development and delivery and the leadership that has developed in the teachers through their participation in KSEC. My contention is circular, KSEC has demonstrated leadership with its programs and at the same time has developed leadership in its members through their development and delivery of these same programs. Leadership has been both a process and a product throughout KSEC's history. This presentation will also specifically address the dynamics of the connection between membership in KSEC and leadership development.

Context of Nunavut

Before I go any further let me provide some geographic, demographic, and cultural context. Nunavut is Canada's newest and largest territory. Formed in 1999, it comprises roughly 1/5 of our country's land mass and is over three times larger than Saskatchewan. The Kivalliq Region is located in south central Nunavut, bordering northern Manitoba and western Hudson Bay. The Geographic Centre of Canada is in my home community of Baker Lake. Flying

from Baker Lake to Winnipeg is a distance of 1600 km and costs over \$2000 for a return excursion ticket. By the way, this is similar to the distance from Winnipeg to Albuquerque, New Mexico. Transportation costs and distances isolate Nunavut communities, a point I will return to later in this presentation.

The Kivalliq Region has a population of 8,400 and is comprised of seven fly-in communities with twelve schools. One hundred and ninety teachers are employed to teach a student population of two thousand nine hundred. Each of the seven communities provides schooling for Kindergarten to Grade 12 and graduation rates are improving each year.

Nunavut resulted from a land claim agreement between the Government of Canada and the Inuit people, which account for about 85% of the territory's population. Since its inception, the Government of Nunavut has worked to integrate *Inuit Qaujimaqatuqangit* (IQ) into its operation and its programs and services. IQ is sometimes referred to as traditional knowledge but "it is more properly defined as *The Inuit way of doing things: the past, present and future knowledge, experience and values of Inuit Society.*"¹ In *Pinasuaqtavut: 2004-2009*, the Nunavut Government reconfirmed its commitment to *Inuit Qaujimaqatuqangit* as a guide to make itself, its programs and its services more responsive to Nunavumiut (people of Nunavut). The eight values that make up *Inuit Qaujimaqatuqangit* include:

- *Inuuqatigiitsiarniq*- respecting others, relationships and caring for people
- *Tunnganarniq*- fostering good spirit by being open, welcoming and inclusive.
- *Pijitsirniq*- serving and providing for family and community
- *Aajiqatigiinni*q- decision-making through discussion and consensus

¹ Inuit Qaujimaqatuqanginnut (IQ) Task Force. (2002). The first annual report of the Inuit Qaujimaqatuqanginnut (IQ) task force (p.7). Iqaluit: Government of Nunavut

- *Pilimmaksarniq*- the development of skills through practice, effort, and action
- *Piliriqatigiinniq*- working together for a common cause
- *Qanuqturniq*- being innovative and resourceful in seeking solutions
- *Avatittinnik Kamatsiarniq*- respect and care for the land, animals, and the environment²

These core values are not isolated but exist in the context of relationships...to the land, to the family, to one's spirit, and to the community. They are responsible for the survival of a people and culture in a most unforgiving environment.

Formation of KSEC

In March 1994, the Kivalliq Science Educators' Community was formed by a group of secondary science teachers and a program consultant. KSEC registered as a charity with Revenue Canada and used this status to raise funds, independent of the schools and Department of Education, for the purpose of delivering an annual regional science fair. This financial burden brought independence and control over our program development. So KSEC became a volunteer collective with the autonomy to develop and deliver youth science engagement programs for the Kivalliq Region.

KSEC has grown and developed over the years, however, its mission has always been rooted in the desire to make science fun and relevant for Kivalliq youth-- relevant to their studies, their everyday life, their careers, and their culture. KSEC's programs now operate from September to August of each year as attempts are made to deliver these activities on an annual basis.

²Government of Nunavut. (2004). *Pinasuaqtavut: 2004-2009: Our commitment to building Nunavut's future* (pp.3-4). Iqaluit

Governance and Structure of KSEC

KSEC's membership is open to Kivalliq residents who are interested in youth science engagement and support its mission and programs. KSEC is governed by a Board consisting of a School Council of teacher representatives and an Executive Council elected by the School Council, from the membership. The Board meets annually at the Regional Science Fair and periodically through out the year via telephone conference calls. The Executive Council carries out the day-to-day business and has signing authority over KSEC's bank account.

KSEC is a volunteer, registered charity devoted to youth science engagement. Its programs have been designed by teachers to support and enhance Nunavut's school curricula, policies, and directives. KSEC programs are active and hands-on.

Kivalliq School Operations (Dept. of Education) nurtures KSEC programs with both in-kind and financial resources. The Science/Math Program Consultant is given time and a modest budget to support KSEC programs. KSO also recognizes the value of KSEC activities like the Regional Science Camp and Fair and the Canada-Wide Science Fair by designating teacher travel as "Duty Travel" (Teacher initiated—no per diems). This is important as teachers do not have to utilize "special leave" credits for KSEC events. Schools are the sites of most KSEC programs and teachers are the facilitators. KSEC programs are voluntary and schools receive many benefits from participation including resources and materials. However, there are some specific costs as well including registration fees and substitute teacher costs for the Regional Camp and Science Fair.

Initially, KSEC focused their programs on classroom relevance and efforts were made to establish curricular connections to the activities. Their concept of relevancy soon progressed to include the significance to everyday life and

careers. Finally, KSEC's view of relevancy evolved to include culture. That is, the relevancy of cultural practices to science and science to culture.

Leadership in Program Development

In order to give you an idea of the program leadership provided by KSEC I will present the scope and depth of a sample of their programs.

Kivalliq Regional Science Culture Camp

The Science Culture Camp was initiated in 2000.

The camps are held on the land and organized around a topic of both scientific and cultural interest. Past themes have included:

2000	Baker Lake	Caribou/Comparative Anatomy
2002	Churchill	Land and Sky/Weather
2003	Churchill	Kayaks/Water
2004	Baker Lake	Rocks and Minerals
2005	Baker Lake	Rocks and Minerals
2006	Chesterfield Inlet	Kayaking
2007	Chesterfield Inlet	Kayaking
2008	Baker Lake	Rocks and Minerals
2009	Baker Lake	Rocks and Minerals
2010	Rankin Inlet	Archeology

Spending time on the land is an important part of Nunavut's culture. The environment plays such an over-whelming role in our daily lives that it is a natural setting for teaching and learning. Elders, teachers, and students slip effortlessly between the roles of instructor and learner in an outdoor setting that is educational, experiential, and fun. In this Cross-Cultural Science Camp, traditional knowledge and environmental awareness are taught through active immersion in the outdoors, direct observation, and guided hands-on exploration. Rather than just incorporate IQ into a science camp, KSEC has attempted to

incorporate a science camp into IQ. The experience values culture and science and is validated by the Department of Education as students receive two high school credits for their participation.

GPS navigation, basic first aid, and camp skills are integrated into every camp, which has both structure and flexibility. Although each camp is planned--they quickly take on a life of their own. The “curriculum as planned” gives way to a “curriculum as lived” as the land becomes both the classroom and instructor. A great example of this interplay between planned and lived curriculum occurred at a camp in Baker Lake in 2000. After a couple of days of studying, butchering, and preparing caribou, the camp was hit by a September blizzard. After digging ourselves out of our tents, the Elders quickly showed us how to build soft snow igloos--packing the snow with our feet and then cutting out the blocks. This teachable moment was not in the plan, but it became an important outcome. The planned dissections were postponed and carried out later back at the school science lab.

Traditional and contemporary knowledge are valued at each camp and an atmosphere of comfort and trust develops. Each evening games are played and a sharing circle gives voice to our enjoyment of each other’s company. In some ways, this fellowship or *Inuuqatigiitsiarniq* is the most important aspect of the camp. Although science is the reason to get together, sense of community is prime. On the last day of the camp, tears are inevitable as participants and facilitators express sadness in the recognition that the camp is over.

Science Engineering Technology (SET) Challenge

Initiated in 1995, the SET (Science-Engineering-Technology) Challenge grew out of the Kivalliq Regional Science Fair. Initially it was an event organized for science fair participants. Its popularity soon led to the development of a distance delivery model for science olympics at the regional level.

The SET Challenge is a collection of fun concrete thematic problems that require cooperation, communication and some science, engineering, and technology to construct a solution. Over the years, SET themes have included: buoyancy, rockets, towers, motion, projectiles and eggs. Each theme translates into five different age-appropriate events for Kindergarten to Grade 12.

In 2008 NorthwTel signed on as event sponsor and provided funding for event Teachers' guides, prizes & promotional items, as well as school & regional awards. Each year schools are sent an event package with instructions, materials, promotional items and awards to coincide with National Science and Technology Week (or Month, as we celebrate it.). Schools run the events, tabulate the results, and present awards. A summary report with results and participation data is sent to KSEC, where regional winners are determined and medals awarded. Participation data is used by KSEC to monitor program efficacy and to share with funders.

The SET Challenge has proved to be a Trojan horse of sorts. Students and teachers bring it into their classrooms because it is fun and engaging, but hidden inside each event is an army of science and cultural outcomes. All SET Challenge events promote many of the guiding principles of IQ including collaboration, hands-on learning, innovative problem solving and others. Where possible, the challenge itself has a cultural connection. For example, *Uuksitaaqtut* (Target Practice) challenged students to build catapults and slingshots as well as traditional Inuit hunting bolos and slings.

Each school organizes the SET Challenge a little differently. Some encourage individual teachers to carry out the events in their classrooms, while others turn it into a school-wide event held in the gym and open to the public. Either way, students get an opportunity to observe, hypothesize, and experiment in authentic hands-on knowledge construction. The scientific method becomes a natural extension of each group's endeavors to solve the problem.

The SET Challenge has become KSEC's most popular event and is much anticipated in Kivalliq schools each year. In 2010, a participation record was set with 2,155 students taking part in the challenge.

Kivalliq Math Month

Kivalliq Math Month was initiated in 2007 as a way to promote hands-on mathematics. Every January, KSEC provides registered schools with program ideas, materials, and promotional t-shirts to support them in a month of mathematical mayhem. Registration also provides schools with a grant of up to \$300 for math camps, math fairs and community engagement events.

Following KSEC's template, many schools host a Math Camp for Grade 5/6 students. The two-day event is filled with mathematical puzzles, games, and challenges. The whole experience is made special when combined with sleeping at the school. Even making pizza or cooking breakfast becomes a mathematical activity.

Math and Munchies is another popular school activity, where the community is invited to the school for an evening of math fun and snacks. Math Month has grown in popularity at the K-Grade 9 level as teachers and students look forward to it each year.

The Kivalliq Regional Science Fair

The Regional Science Fair is the flagship event for KSEC. Indeed, the committee was initially formed specifically to ensure that science fairs were held annually in the Kivalliq Region. Community Science Fairs are organized for Kindergarten-Grade Twelve students, while the Regional Fair is open to Grade 7-Grade 12 students. In some schools, the science fair runs a close second to the Xmas concert in terms of community attendance

Each year thirty youth attend the 3-day fair. KSEC funds the event (\$36,000) and coordinates it with the local host committee. Every fair is unique but includes social and cultural activities as well as science workshops and challenges. The projects are displayed and adjudicated to determine the Kivalliq delegation to the Canada-Wide Science Fair. Fairs are thematic and the theme ties all of the activities together. Past themes have included: Skidoos, Fish and CSI. This year's theme is Climate Change.

Fun is ever-present at the regional event. Team challenges promote cooperation and problem solving. Whether racing a vacuum cleaner hovercraft across a gym or guiding a cardboard skidoo down a hill, friendships are made. In a region where travel opportunities for youth are rare, and outside of sports nearly non-existent, the science fair gives youth an opportunity to meet their peers from other communities and make life long friends.

The Regional Fair is also a show-case of the work done by our students. The exchange of ideas is inevitable and each year the quality of displays and projects increases. Over the years, the Kivalliq delegation to the Canada-Wide Science Fair has established a winning legacy, taking home five medals, four special awards and numerous honourable mentions. Last year a Kivalliq project studying the effect that *qamutik* sled length has on pulling force won a bronze medal in the Senior Physical and Mathematical Science Division.

The Kivalliq Regional Science Fair gives students something to work for, a forum to share their finished projects and complete a cycle of success. Many such cycles are key to the ultimate goal of high school graduation and post secondary education.

KSEC's efforts to incorporate Inuit culture into its programs actually predates the formation of Nunavut . In 1995 at the Kivalliq Regional Science Fair in Baker Lake, a panel of Inuit judges provided feedback and made two recommendations

to the KSEC Board. First, they recommended that projects be displayed in both English and Inuktitut as a way to value the language and engage Elders. Second, they thought that the project topics were too "southern" and did not seem to relate to life in the Kivalliq. KSEC responded and developed a modified version of the Canada-Wide Science Fair Judging booklet, which now rewards bilingual (Inuktitut and English) displays as well as projects that deal with Northern-relevant topics. It also introduced a new cash award for the best project that addressed a topic relevant to the north.

Projects and displays quickly changed as a result of the new judging process. Model volcanoes gave way to investigations into the strength of seal sinew or a study of the seasonal affective disorder. Our success at the Canada-Wide Science Fair also improved as our projects caught the eye of the public as well as the judges. Participants were just as likely to be quizzed about language and geography as they were about science and all in all, the experience was and still is special for our participants.

A Sample of Kivalliq Award Winning Projects at the Canada Wide Science Fair

- A Comparison between Fresh Water Ice and Sea Ice
- Size Does Matter: A Study of *Qamutik* Length
- Solving the Stink Pipe Problem--Part 1 & 2
- Are Skins Warmer than the Boots
- Whose Coat is Warmer?
- Skidoo Fuel Pump Deicer
- Inuit Plant Medicines
- Seasonal Affective Disorder
- A Comparison of Sea Mammal Fats as Fuels
- *Ivalu* vs Synthetic Sinew

Other KSEC Programs

KSEC also coordinates:

- Regional Science Awards consisting of laptop computer & printer for a Male and Female graduate
- Recruitment, selection, and funding of an annual participant in the Schools on Board Program
- Logistical support for Actua Summer Science Camps in many Kivalliq communities

KSEC Partnerships

Partnerships are necessary to develop and deliver KSEC's science outreach programs. KSEC's charity status allows it to request and receive funds from business, government, and Inuit Land Claim sectors of Nunavut, but it is a time consuming and stressful burden to keep the funding ahead of the spending. The annual budget for KSEC's programs tops \$90,000 with youth travel accounting for the lion's share, nearly 50%.

Leadership Recognition

It is clear from the program descriptions that KSEC has been a leader in the development and delivery of youth science engagement programs in the North. The sustainability of its programs and their participation numbers speaks to this leadership and the commitment and the creativity of KSEC. It has also received external validation and been Nationally recognized, winning a Partners in Education Award from the Conference Board of Canada in 1999 and a Science Promotion Award from the Natural Sciences and Engineering Research Council of Canada in 2009.

Besides developing innovative youth science engagement programs, KSEC has also developed leadership within its membership. Before I address KSEC's role in this leadership development, let's take a closer look at KSEC's members.

KSEC's Membership

KSEC is essentially Kivalliq's secondary science teachers as well as some elementary teachers. As a group, they are generally young. At regional events it is sometimes hard to tell who is a teacher and who is a student. They are usually new to both teaching and the north. Currently all of our secondary school science teachers are non-Inuit and most lack Inuktitut language skills and intimate knowledge of the Inuit culture. Many teachers move on after 2-3 years, but some stay and quickly make the transition from bewildered rookie to reassuring mentor and this has helped KSEC to maintain a great mixture of urgency, energy and creativity. Since its formation seventeen years ago, KSEC has had less than 100 different active members. However, from this group there have been several recipients of the Northwest Territories and Nunavut Association of Professional Engineers & Geoscientists-- Science Teacher of the Year Award and two Prime Minister of Canada Award winners.

As was noted seventeen years ago by those who founded KSEC, Kivalliq secondary school science teachers are isolated. In many of our communities, they are the only science teacher on staff, and they often do not have specialist training in science education. Kivalliq schools are geographically isolated with no roads connecting them and extremely expensive air service as the only transportation option. All of our communities have internet access, but most schools have poor bandwidth. Professional development opportunities are rarely science-based as all teachers in the same school are compelled to take their professional development at the same time. That is, the school is shut down for a week while teachers take part in professional development activities. Choosing a time to shut down a school is a staff negotiation and so the dates rarely, if ever, coincide with a National or Provincial Science Education conferences. These factors compound and magnify one's sense of isolation. Ironically it is this very sense of isolation that compels many teachers to join KSEC, buy into its collective mission, and support its programs.

Leadership Development

If isolation brings KSEC its members, what does KSEC provide to these teachers that keeps them engaged and nurtures their growth?

In order to determine why teachers volunteer with KSEC, I asked a sample of past and present members the following questions:

- Why do you volunteer your time for KSEC programs?
- What have you gained personally and/or professionally (if anything) from your participation in KSEC?

Their answers are categorized and presented in their own words below.

Mentorship and Support

Past and present members identify Mentorship and Support as reasons that they stay involved

“...[KSEC] allowed me to gain advice from more experienced science teachers about science curriculum and programming in Nunavut, but also (and perhaps more significantly) about teaching in Nunavut schools.”

“Being a part of the KSEC has provided me with great support from teachers in our region.”

“It is great to get together with such a great group of educators with such positive attitudes”

Professional Development/Confidence

Member teachers feel that they have grown professionally or gained confidence from their involvement in KSEC.

“I have gained experience in different ways of teaching science and math that are invaluable to an English teacher”

“The teachers involved are inspiring. After being involved in a KSEC program, I am motivated to improve professionally.”

“...gave me confidence in my ability as a science teacher”

“I believe that being surrounded by the amazing members of KSEC has enabled me to take on projects I would have never dreamed possible.”

Networking

Networking for science teachers was another theme that emerged from their responses

“While I was geographically isolated from other science teachers, I never felt alone.”

“I enjoy conferencing with other teachers and KSEC has given me the ability to do this on a regular basis through teleconferencing, email, and face-to-face at regional events.”

Bonding with Students

Bonding with students was seen as positive result that teachers identified they received from participation in KSEC programs.

“It's a lot of fun to work with students from other communities...”

“KSEC has helped me create a classroom of success, and my students’ small successes have now turned into a community success. Our students are becoming leaders, graduating high school and moving onto post secondary institutions, and I believe KSEC has been a driving force in our students’ success.”

Cultural Orientation

Most respondents credited KSEC and/or KSEC programs with providing them with an orientation to the cultural context of the Kivalliq.

“KSEC is one of the main reasons I am still teaching in the North, and I have had 8 wonderful years. The teacher turnover in the north is quite high, and I have watched fantastic teachers in other subject areas leave because they do not have the support that I have had. I have been encouraged to embrace what we have in Nunavut, and use traditional knowledge as a foundation to teach scientific concepts. I met some dynamic science teachers through KSEC who found ways to link Inuit Culture into science, and focus on making our students proud of who they are and their rich heritage.”

“The camp represented an opportunity to teach science on the land, and reconnect our students to Elders in a traditional way. It was incredible to watch them grow and develop in a span of only a few days. I will never forget my first Science Culture Camp, and I have been fortunate to attend the camp in four different places since. “

“KSEC is so much more than just science, it is an organization that uses science to make people feel good about themselves and their culture.”

Leadership IQ

One respondent mentioned leadership development as a positive result of participation in KSEC and specifically identified KSEC adherence to IQ principles as facilitating this development.

“KSEC actively promotes teacher development and leadership. The Leadership is not just in the tools, routines and structures, but grounded in the IQ principles which actively develop leadership practice.”

This was an interesting idea for me. I had always felt that KSEC developed leadership in its members and worked hard to incorporate the IQ Principles into its programs, but I never considered a connection between the two. Now it seems obvious.

Since the Government of Nunavut adopted the IQ principles, KSEC has endeavored to make them foundational to its programs, however, it never consciously applied them to the governance or leadership of its organization. This has happened more by default than design. The Principles of *Inuit Qaujimaqatunagit* are leadership principles that well serve an isolated collective that needs to learn quickly, efficiently, and adapt to survive. While KSEC’s context is no where near as dramatic as that from which the IQ principles evolved, it does share some similarities. As an isolated collective, KSEC, by necessity, adopted leadership and governance principles that strengthened its group.

Upon examination, KSEC had implemented or integrated many of the IQ principles into programs and governance. For example:

Inuuqatigiitsiarniq (respect and care for people and relationships)

KSEC's respect and care for members has resulted in strong relationships among members and between members and their students.

Tunnganarniq: (good spirit through inclusive, open, and welcoming behaviour)

KSEC's attempts to make its organization and programs inclusive have resulted in trust and camaraderie among its members.

Pijitsirniq: (serving and providing for family and community)

KSEC's charity status has made fundraising possible and program development autonomous but it has also ensured that KSEC be driven by volunteers who believe in its mission. KSEC members log many days of volunteer service developing and delivering KSEC programs.

Aajiqatigiinniq: (decisions through discussion and consensus)

KSEC operates almost exclusively by discussion and consensus and this contributes to the cohesion of the group.

Pilimmaksarniq: (skill development through practice and action)

Experiential learning or baptism by fire, as some have referred to it, is evident in all of KSEC's programs. Members watch, learn, do, and teach in quick succession. Many extend the progression to include "develop" as they originate their own innovative programs for KSEC or back at their schools.

Pilirigatigiinniq: (working together for a common cause)

KSEC programs would not get off the drawing board was it not for cooperation and teamwork of its members. Program delivery requires a group that can rely on its members.

Qanuqtuurniq: (being innovative and resourceful in seeking solutions)

KSEC encourages its members to be innovative and resourceful and this is readily apparent in the programs and events developed by members for KSEC and Kivalliq schools.

Avatittinnik Kamatsiarniq: (respect and care for the environment)

KSEC's Science Culture Camp does provide members with an opportunity to learn from Elders on the land to better appreciate this strong connection. Respect and care for the environment is something that KSEC promotes as responsible science teachers. On a broader level, environmental stewardship aims for sustainability and KSEC's programs have been sustainable for seventeen years. Some former participants now work in our schools and deliver KSEC programs and children of former participants are now participants themselves in our elementary schools.

For KSEC, what began as an attempt to increase the relevance of its programs for students has also resulted in nurturing leadership among its members.

KSEC's Sustainability

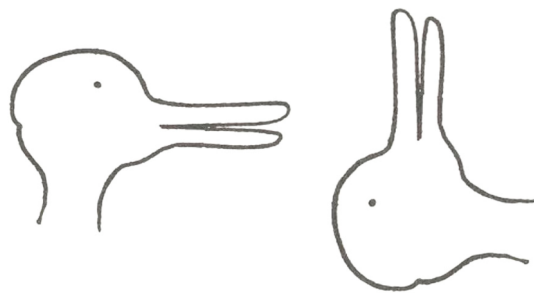
KSEC has sustained itself over the years for many reasons. There is a steady stream of new, young teachers feeling isolated and insecure about teaching science who are drawn to the security of KSEC's collective. These same teachers provide the energy and enthusiasm that power the programs. The collective builds relationships among teachers as skills and knowledge are shared and learned. Most teachers move on after three or so years and are replaced by fresh teachers who repeat the cycle and renew the organization. Those teachers who stay, assume leadership positions within KSEC or within their schools, their communities, or the teachers' association. However, if organizational sustainability depended only on a proper ratio of new and experienced teachers, organizations like KSEC would be quite common throughout the North. Sadly they are not.

The support given by the Department of Education, through Kivalliq School Operations cannot be underestimated. By allowing a program consultant the time to attend to the details of funding proposals, reports, archiving, and resource orders and distribution, KSEC, with its small membership, has been able to continue on when key individuals leave the organization. Without this constant, institutional support from Kivalliq School Operations, KSEC would lose its continuity and soon unravel.

Conclusion

I realise that this is not a research study and that my opinion has only been corroborated by a group of individuals that subscribe to the same mission as I do. However, it is clear that the Kivalliq Science Educators Community has demonstrated leadership in youth science engagement program development and delivery and that its members have grown as leaders through their development and delivery of and participation in KSEC programs. Participation in KSEC has networked and mentored teachers and provided them with an introduction to the cultural context of the Kivalliq. Relief from isolation attracts new members to KSEC and combined with program independence has created a collective autonomy that helps to drive the organization and connects program development with leadership. To survive independent collectives require principles of governance and leadership that strengthen the group. *Inuit Qaujimaqatuqangit has provided KSEC with such principles.*

During the course of writing this paper my understanding of the dynamics of this leadership development has evolved. It was similar to the optical illusion of the duck and rabbit. Before writing the paper, the connection between program development and



leadership was clearly a duck. The autonomy of teacher-driven program development created leadership in the product as well as the producer.

After my small survey, an unforeseen comment linking IQ principles to leadership development had changed the duck into a rabbit. Culture or specifically, *Inuit Qaujimajatuqangit*, was the missing link between leadership development and program development. However, as you may suspect from the analogy, it is really both. Teachers are drawn to KSEC's autonomous collective, which in turn is sustained by the principles of Inuit Qaujimajatuqangit. It is my conclusion that for KSEC, the nexus between program development and leadership is collective autonomy and culture, specifically *Inuit Qaujimajatuqangit*.

Thank you for your attention.