









The Arctic Inspiration Prize is the largest annual prize in Canada. It inspires, enables, and celebrates the achievements of the people of the North, recognizing diverse teams with innovative projects in the fields of education; health and wellbeing; culture, arts and language; science and traditional knowledge; climate change; food security; and the economy.

**Nominator**: Hal Timar, *Nunavut Economic Developers Association* 

**Team**: Ryan Oliver (Team Leader), Michael Despault, Evan Despault, Nyla Innuksuk, Kim Masson, Talia Metuq, Jamie Okatsiak, Taha Tabish, Shirley Tagalik, Nicolas Polito.

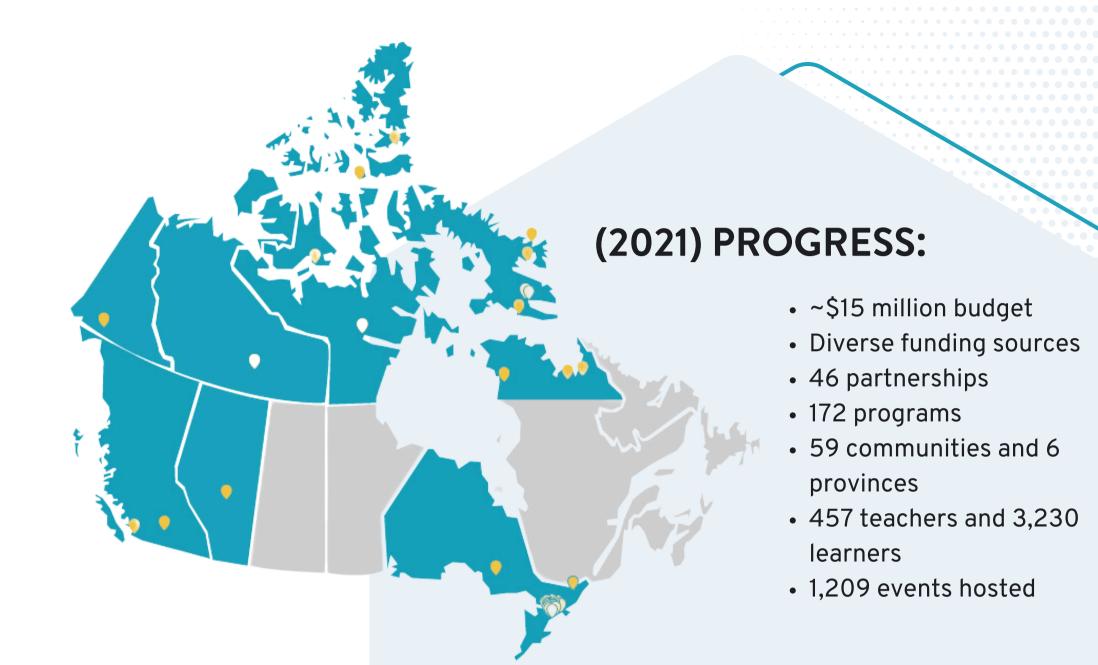
This report was compiled and created by the **Qatalyst Research Group**, with the help of **<u>Ilitagsiniq</u>**, the project team, and AIP.

# THE STORY OF PINNGUAQ

At the time of the AIP award in 2016, Pinnguaq was running a few programs with a staff of a few people. One of those programs, Code Club, provided coding workshops and was expanded into te(a)ch (now known as Makerspace or Community Workshops).

# (2016) WHERE IT BEGAN:

- \$400,000 AIP Prize
- Few partnerships and sources of funding
- 3 staff
- 2 communities in Nunavut



When the program first began, Pinnguaq trained an average of 500 youth per year in Nunavut. Now they are training over 60,000 individual youth across Canada - including around 15,000 per year in the NWT, Yukon, Nunavut, Nunavik, and Labrador.

# https://www.youtube.com/watch?v=xvM2eiwSzLA

# THE CREATION OF TE(A)CH

PINNGUAQ =PLAY

TE(A)CH = PROGRAMMING LANGUAGE

te(a)ch is a computer science curriculum designed for Arctic students. The goal of the program is to introduce, foster, and encourage people of all ages to understand, control, and create with technology, not just simply consume it.

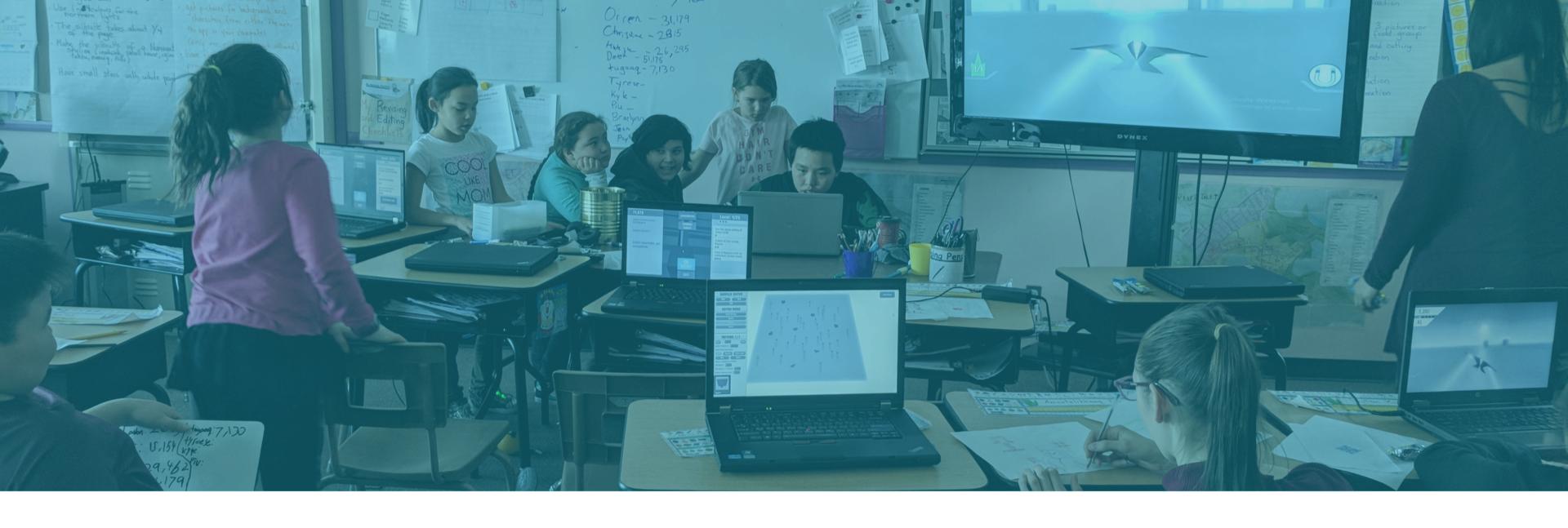
Teaching technology through play and games:

- computer science
- computer literacy
- digital art
- coding
- tech safety

[AIP funding]...absolutely vital – it was the moment we became a real company – so grateful – we started paying back...we are currently paying 10k a year we have been fortunate – it was a key moment and we want to support this fund to continue... it is seed funding where it may not have been available. It is vital to just be able to give that seed [funding], that is done in a way that is not confined by fiscal years or heavy government oversight.

## **Ryan Oliver**

CEO and Founder of The Pinnguaq Association



# SUSTAINABILITY: TEACH THE TEACHER

The "Made in Nunavut" online curriculum features 52 weeks of lessons (over 100 modules) and tips on teaching each lesson. Te(a)ch instructors work with schools and local youth organizations to identify 2-5 promising young adults who receive training and get access to the curriculum, so they continue to teach others about technology after te(a)ch instructors leave the community.

This makes the program sustainable (teachers stay in the community), inclusive, and accessible to nearly everyone. Every participant receives a laptop loaded with an MS operating system and curriculum to continue teaching and learning.

Since 2016, participants include 550 "trained trainers" (individuals who are not professional teachers and can support the program through a Youth Centre or other location) and over 10,000 teachers across Canada, with at least 500 in Nunavut.

# TE(A)CH WORKSHOPS

**IQALUIT:** FEBRUARY 2017

The Iqaluit workshop was the first in a series of training workshops conducted in Nunavut with AIP funding support.

In this workshop the group of 18 students recorded traditional throat singing and used their new coding skills to create remixes of the samples. They also created an original game, which they named K9 Cannibals. Kids who participated in a week-long coding workshop got to keep the laptops they learned on. (*Igaluit kids go home with free laptops after coding workshop* CBC News)

# CHESTERFIELD INLET: MARCH 2017

Evan Despault of Pinnguaq Technology Inc. and Taha Tabish of Qaujigiartiit visited Chesterfield Inlet, hosting a full class and providing free laptops to all participants. This session featured the train-the-trainer element and was extremely well received.

# BAKER LAKE: MARCH 2017

Baker Lake had similar programming to Chesterfield Inlet. Brandon Bunnie and Taha Tabish led the program, and despite 2 days of blizzards, instructed a full class and a standard train-the-trainer session.



# COMMUNITY-DRIVEN WORKSHOPS

Communities finds a way to fit the training to their priorities and recruit youth. Each community is different - in one community, they wanted to learn how to program the new sewing machines they received.





COMMUNITY-DRIVEN WORKSHOPS







At the end of the day, we are creating a space where people can create.

Ryan Oliver

CEO and Founder of The Pinnguaq Association



# BUILDING STEAM SKILLS

Pinnguaq programs, including te(a)ch, encourage growth in STEAM: science, technology, engineering, arts, and mathematics. From understanding how online games are designed to coding mobile apps, from expressing culture through digital art to addressing digital inequity in communities, STEAM inspires knowledge sharing, playfulness, employment opportunities, and wellbeing.

The organization blends STEAM learning with land-based teachings and cultural storytelling to promote community-led innovations and sustainability. Pinnguaq aims to incorporate their curriculum in schools across Canada, and continue to have Indigenous-design and Indigenous-led technology programs.

# MORE THAN JUST COMPUTER SKILLS

# LANGUAGE

• Built an Inuktitut reading app and launched writing workshops.

## TRADES SKILLS

- conducted a workshop at the Iqaluit Men's Shelter on how to repair a computer
- te(a)ch offers an internship program and has had individuals who started as students, then became interns, and eventually became employed with the organization and are now developing games/apps.

### **HEALTH & WELLNESS**

- Partnered with Qaujigiartiit Health Research Centre (QHRC) and the Embrace Life Council/Isaksimagit Inuusirmi Katujiqatigiit to incorporate mental health and art into the entire sphere of the curriculum.
- Created a game with children across Nunavut that taught cognitive behavioral therapy.

## **EMPOWERMENT**

 Technology can be used to build many other skills such as writing, film, photography, art, story telling.





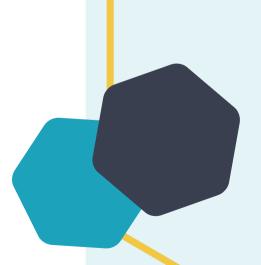
That's amazing! I know this game, I played it a lot on my tablet a few years back. Congrats on the collaboration! I really hope more apps get translated into Inuktitut!

# Armand de Sillegue

[Comment on a collaboration between the game Osmos and the translators at Pinnguaq to include Inuktitut in the award-winning game]



AIP LAUREATES COLLABORATE
FOR INNOVATION AND
SUSTAINABILITY



Arctic Inspiration Prize laureates SmartICE, Ilitaqsiniq – Nunavut Literacy Council, and Pinnguaq Association are working together to support each other, build capacity within communities and increase access to digital skills and literacy.

Ilitaqsiniq and Pinnguaq launched Iqalliarluk – an Inuktitut Typing Game, created new stories and songs in the Uqalimaarluk app, and launched a new digital game to promote Inuktitut literacy;

In early 2020, SmartICE was featured in the first issue of Root & STEM, Pinnguaq's digital STEAM resource for educators. The article, SmartICE: Tracking Ice Safety in a Changing Climate,

<u>https://pinnguaq.com/stories/smartice-tracking-ice-safety-in-a-changing-climate</u>

In 2020, three AIP laureates received project partnership funding through Canada's Ocean Supercluster to develop technical skills training for Inuit participants across Inuit Nunangat called the Inclusive Workforce for Arctic Ocean Technology Project.

# OTHER FUNDERS AND SUPPORTERS

# **FUNDERS**

- Government of Canada
- Government of Nunavut
- Kakivak Association
- Computers For Success
   Nunavut
- Government of Ontario
- Kawartha Lakes
   Community Futures
   Development
   Corporation



### **SUPPORTERS**

- Embrace Life Council
- Qaujigiartiit Health Research Centre
- SmartICE
- SIKU
- Arctic Eider Society
- Actua
- Code Club World
- Curve Lake Cultural Centre
- HelpAge Canada
- Many Hats Studios and 56K Games
- Hinterland Games
- Nunavut Sivuniksavut
- SSI Broadband
- Canadian North
- Mushkegowuk Council
- Mobilizing Inuit Cultural Heritage
- Brilliant Labs
- The Raspberry Pi Foundation

- We Matter
- John & Brenda Romero
- Canada Learning Code
- Make Stuff Move
- Kids Code Jeunesse
- Kawartha Art Gallery
- Kawartha Lakes Library
- <u>Ilitaqsiniq</u>
- Hemisphere Games
- A&B Suluk Translations
- Treaty 4 E-Sports
- Lindsay & District Chamber of Commerce
- York University
- <u>City of Kawartha Lakes Boys and Girls</u>
   <u>Club</u>
- <u>Kativik Regional Government</u>
- The Nunavut Arctic College
- <u>Pitquhirnikkut Ilihautiniq / Kitikmeot</u>
   <u>Heritage Society</u>

