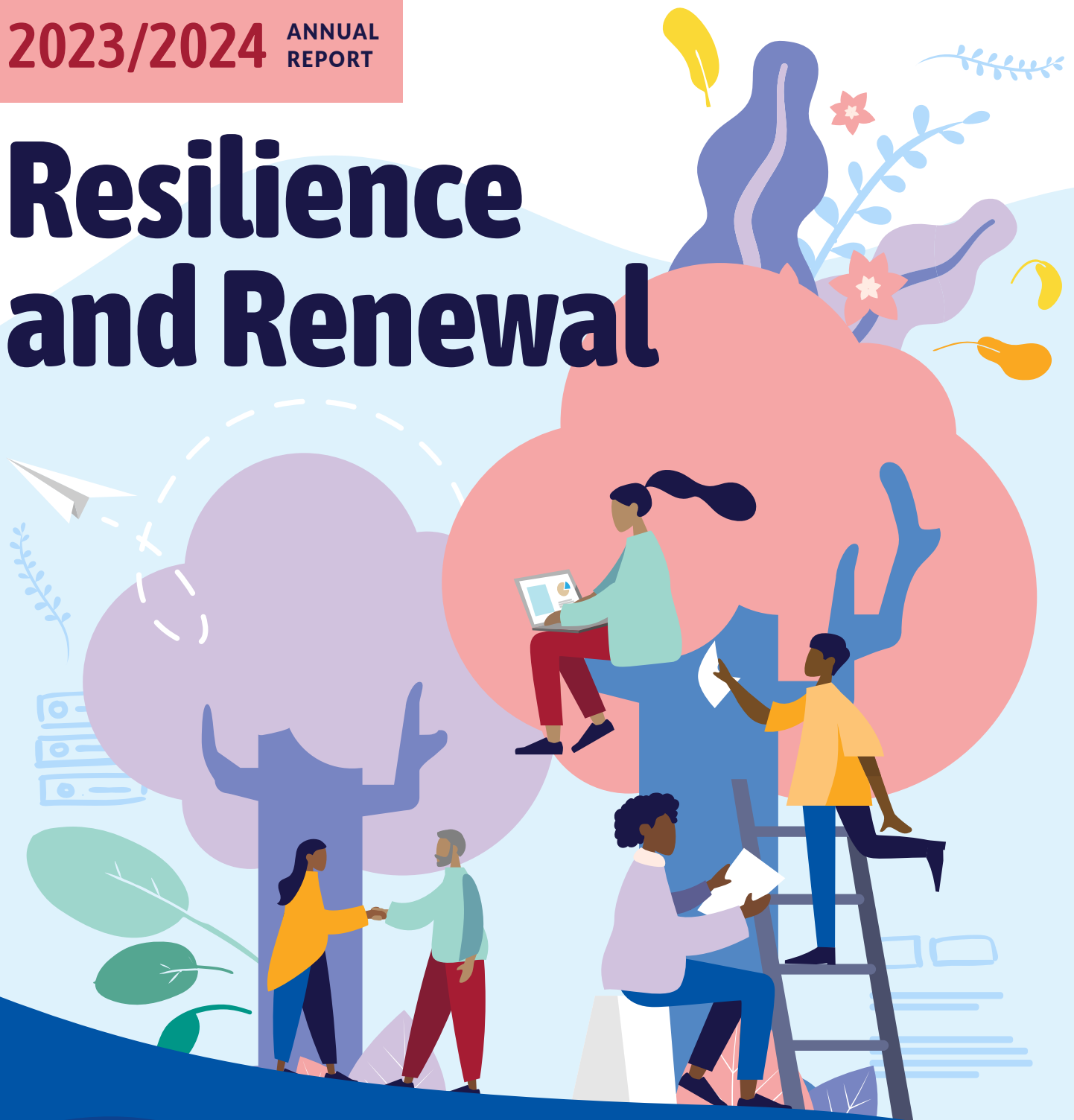


2023/2024 ANNUAL
REPORT

Resilience and Renewal



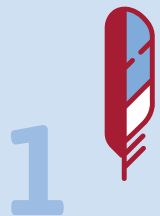
About NORDIK Institute

NORDIK Institute is a community-based research organization affiliated with Algoma University. Incorporated in 2006, NORDIK grew out of AU's Community Economic and Social Development (CESD) program due to the demand for localized data, research and place based solutions and serves as a mechanism for university-community partnerships. We undertake diverse initiatives with foci on northern, Indigenous, rural and smaller urban communities. Our mission is to promote more vibrant, caring and sustainable communities through research, dialogue, analysis and reflection dedicated to the practice of holistic community development. NORDIK's approach to community development and research emphasizes the interconnectedness and mutual importance of four pillars of resilience that support healthy, vibrant and fulfilling places: cultural vitality, social equity, environmental sustainability and economic diversity and growth.

Vision

Northern Ontario is a sustainable, inclusive, and self-sufficient region at the forefront of reconciliation and community development.

Strategic Goals



Advance Partnerships for Indigenous Research Sovereignty.



Foster Local & Regional Evidence-Based Dialogues on Issues Critical to Northern and Indigenous Communities.



Cultivate Northern Research Talent with a Supportive, Inclusive Team-Based Atmosphere.



Connect Students, Researchers and Community in Projects that Contribute to Social, Economic & Environmental Sustainability & Justice for Northern and Indigenous Communities.

Board of Directors

David Marasco
Istvan Imre
Kramer Rousseau

Krista Bissiallon
Lauren Doxtater (Chair)
Steven McCoy

NORDIK Institute Team

Director of Research: Dr. Tamanna Rimi
Director of Operations: Dr. Elaine Ho-Tassone
Research Coordinator: Dr. Jude Ortiz
Manager of Communications: Amy Boyer

Research Associates

Dr. Aaron Gordon (Algoma University)
Dr. Ahmed Aziz (Algoma University)
Prof. Andrea Pinheiro (Algoma University)
David Thompson (RAIN, SSMIC)
Dr. Edward Turgeon (Algoma University)
Dr. Elaine Ho-Tassone (Algoma University)
Elizabeth Garcia (Colombian Ambassador in Bolivia)
Dr. Gayle Broad (Algoma University)
Haley MacLeod (WCS Canada and Trent University)
Dr. Jody-Lynn Rebek (Algoma University)
Dr. Laura Wyper (Algoma University)
Dr. Linda Savory-Gordon (Algoma University)
Dr. Melanie Goodchild (Algoma University)
Michael Burtch (Artist, Art Historian)
Dr. Nusrate Aziz (Algoma University)
Dr. Pedro Antunes (Algoma University)
Dr. Sean Meades (Algoma University)
Dr. Sheila Gurner (Algoma University)
Dr. Sue Chiblow (University of Guelph)
Dr. Tamanna Rimi (Algoma University)
Dr. Teryn Bruni (Algoma University)
Dr. Ushnish Sengupta (Algoma University)
Dr. Vivian Jiménez-Estrada (Algoma University)

Research and Project Staff

Ajaz Shaikh
Alexander Mirault
Alexandra Ouimette
Amanda Debassige
Christopher Solomon
Cynthia Tribe
Elizabeth MacMillan
Hannah Caicco
Jennifer Deleary-Jewell
Kashfia Ashraf
Kendall Mitchell
Kiki Vetrie
Lydia Johnson
Mallory Solomon
Miranda Moffat
Nadine Roach
Tara Burrell
Xuechen Yuan
Zeel Patel

Students/Student Placement

Abdul Khan
Absaar Mohammed

Graphic Designer

Gabrielle Louttit, Associate RGD

Director of Research Report

Tamanna Rimi, Director of Research



This year, our research initiatives have embodied the spirit of resilience and renewal, showcasing our collective capacity to adapt, innovate, and lead meaningful change in a rapidly evolving world. Together, we have addressed pressing local and global challenges, co-created knowledge, and catalyzed change that fosters sustainable progress and long-term impact.

Our teams developed robust frameworks to advance social impact, health and well-being in Indigenous communities, cultural resilience, and economic sustainability—ensuring that our work remains grounded and relevant, even in times of uncertainty and crisis. Our collaborations prioritized grassroots engagement and inclusive, participatory approaches that empowered local communities in environmental stewardship,

social equity, and informed policy-making. Indigenous-led, culturally centered research and development initiatives in mental health and addictions, social entrepreneurship, youth well-being, and decolonizing education continued to position us at the forefront of community-based research and transformation.

As we embrace renewal, we are boldly investing in future-focused research that envisions innovative spaces and a sustainable future. Our commitment to resilience means we don't just respond to challenges—we shape the solutions that build a more equitable and sustainable future.

Of our 18 active projects this year:

- 72% advanced partnerships supporting Indigenous research sovereignty, aligning with our strategic priorities.
- 78% nurtured Northern research talent in inclusive and supportive environments, building local expertise.

- 83% facilitated meaningful connections between students, researchers, and communities, driving sustainability and justice across social, economic, and environmental dimensions.
- 50% were initiated or co-led by Indigenous communities, underscoring our deep and ongoing commitment to Indigenous leadership in research.

Our progress is a testament to the dedication and hard work of the entire NORDIK team—our research associates, researchers, research assistants, staff, and students—alongside the steadfast support of our board, community partners, and Algoma University.

We invite you to explore this year's annual research report to see how our collective efforts are creating meaningful change and strengthening communities across Northern Ontario and beyond.

Director of Operations Report

Dr. Elaine Ho-Tassone, Director of Operations



I am excited to contribute to this period of growth and development of our incredible organization! Last year, NORDIK Institute experienced new operational capacity with the introduction of two new Director positions, increased support from Algoma University, and taking on the Site Search project/Community Support Team. In the 2023-2024 fiscal year, we built on this foundation to evolve the way we operate – a process that will continue into the next (2024-2025) fiscal year under the leadership of our four-person management team.

Over the 23-24 fiscal year, our Board of Directors implemented about a dozen executive actions, including supporting turnover on our Board, welcoming new Research Associates, approving our largest ever operating budget, initiating a new governance system, voting to move all financial

management in-house as of May 1, 2025, and approving the addition of new office space to accommodate our growing staff in the next fiscal year.

This year, we celebrated our first Service Awards, thanking three of our founding members for more than 20 years of uninterrupted engagement in NORDIK's core and strategic operations, including mentorship and coordination of its many staff along the way: Dr. Gayle Broad, Dr. Linda Savory-Gordon, and Dr. Jude Ortiz. In celebrating this commitment, I also want to recognize the handful of other founding members who were absolutely instrumental in our early years, especially Alice Corbiere.

In addition to our Service Awards, we offered our first fundraising award to Tara Burrell, Lead for the Community Support Team, for her hard work, diligence and tenacity in securing and negotiating more than \$1 million for the Community Support Team for the years of 2024-2027. In highlighting this notable accomplishment, I also recognize the role each and every single one of our team members – many staff, students, contractors, community partners, and volunteers – serve together in every success and achievement we

celebrate. Not a single one of us achieves anything alone, without immense support from others we work with.

A sincere thank you to our entire team and all our collaborators for everything you do every single day to make NORDIK Institute the caring and impactful organization it is!

Finally, our management team offers a special acknowledgment to Algoma University, whose increased support of NORDIK Institute has catalyzed unprecedented growth and capacity for us and our communities. Since last year, Algoma University's contributions increased nearly 60% to over \$400,000 in operational funding for the 2023-2024 fiscal year. This increased capacity allowed us to take on more staff and larger projects, in turn enabling us to exceed \$2 million in revenue for the first time in our decades-long history. At the same time, NORDIK reduced our debt to Algoma University by half, while growing our net assets at year-end.

Thank you to Algoma University and to ALL our funders for choosing to partner with NORDIK Institute in the many incredible projects our teams pursue!

Executive Summary

By the Numbers



GOAL 1

Advance Partnership for Indigenous Research Sovereignty.



13
Projects

GOAL 2

Foster local and regional dialogues on issues critical to Northern Ontario and Indigenous communities.

10
Projects



GOAL 3

Cultivate research talent with a supportive inclusive team-based atmosphere.



14
Projects

GOAL 4

Connect students, researchers and community in projects that contribute to social, economic and environmental sustainability and social justice for Northern and Indigenous communities.

15
Projects



9

Projects initiated or co-led by an Indigenous organization or person.

► 16 NORDIK HIRES

Contracts over 3 months, full-time and part-time.

► 7 INDIGENOUS HIRES

Over 3 months.

► OVER 30 OTHER PROJECT PERSONNEL, OVER 50% INDIGENOUS

Project hires, contractors and short-term (over 3 months) staff.

► 5 STUDENT PLACEMENT POSITIONS



10

Projects involving community-based researchers.



9

Projects involving Indigenous community-based researchers.

Active Projects

May 2023 – April 2024

Project Name	Project Lead	Contact information
Aki Kiikinomakaywin	Dr. Haley McLeod	haley.macleod@algonau.ca
Batchewana First Nation Education Wellness Project	Dr. Teryn Bruni	teryn.bruni@algonau.ca
Bridging the Gap: Social Finance for Indigenous Food Systems	David Thomospon	dthompson@ssmic.com
Coalition for Algoma Passenger Trains (CAPT)	Dr. Linda Savory-Gordon	linda.savory-gordon@algonau.ca
Indigenous Women Storying and Interweaving their experiences of Gendered and Colonial Violence in Baawaating	Dr. Vivian Jimenez-Estrada	vivian.jimenez-estrada@algonau.ca
Upper Great Lakes Community-based Monitoring	Dr. Elaine Ho-Tassone	elaine.ho-tassone@algonau.ca
Evaluating LEAP	Dr. Tamanna Rimi	tamanna.rimi@algonau.ca
Freshwater and the Blue Economy	Dr. Jody-Lynn Rebek	jody.rebek@algonau.ca
GLOCAL - Global Mindsets for Local Regenerative Futures	Dr. Jody-Lynn Rebek	jody.rebek@algonau.ca
IN SITU: Innovation in Rural Cultural and Creative Industries	Dr. Jude Ortiz	jude.ortiz@algonau.ca
Institute of Peoples, Territories and Pedagogies for Peace (IPTP) - Global Decolonizing Education and Indigenous/Afrodiasporic Peoples' Diplomacy Delegation	Dr. Sheila Gruner	sheila.gruner@algonau.ca
Keepers of the Circle Entrepreneurship Program	Amy Boyer Elizabeth MacMillan	amy.boyer@algonau.ca elizabeth.macmillan@algonau.ca
Northern Ontario Labour Force Retention and Attraction in the Post-Pandemic Digital Economy	Dr. Sean Meades Dr. Nusrate Aziz	Sean.Meades@algonau.ca
Packsack Project	David Thomson Amy Boyer	amy.boyer@algonau.ca
Shingwauk Residential School Community Support Team	Tara Burrell	Tara.Burrell@algonau.ca
Spruce Budworm Early Intervention	Jennie Pearce	
Trade Area Analysis for the Sault Ste. Marie	Dr. Sean Meades Dr. Nusrate Aziz	sean.meades@algonau.ca nusrate.aziz@algonau.ca
V.O.L.T.: Valuing Ontario Libraries Toolkit	Dr. Sean Meades Dr. Jude Ortiz Dr. Tamanna Rimi	sean.meades@algonau.ca jude.ortiz@algonau.ca tamanna.rimi@algonau.ca

NORDIK Welcomes New Research Associates



Dr. Ahmed Aziz

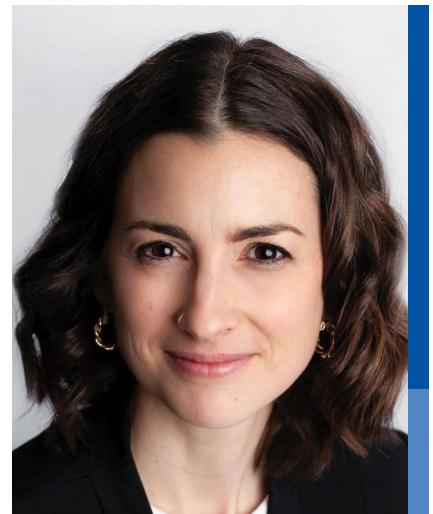
Assistant Professor, *Faculty of Business and Economics, Algoma University*

Dr. Ahmed Aziz is an Assistant Professor in the Faculty of Business and Economics at Algoma University. Before joining the Algoma faculty, he was a NOHFC Fellow at Algoma University and served as an Assistant Professor at the University of Dhaka, Bangladesh. In his extensive academic career and research as an applied microeconomist, Dr. Aziz seeks to address socioeconomic inequalities and advocates for policies promoting fair treatment and opportunities for all, regardless of an individual's background, and the knowledge gained from this research should aid our community in expanding their understanding of how public perceptions affect labour market disparities between indigenous and settler communities. His research interests are: Labour Migration, Public economics, International and regional trade, Community economic development.

Dr. Teryn Bruni

Assistant Professor, *Department of Psychology, Algoma University*

Dr. Bruni is a Pediatric Psychologist with expertise in integrated care, school psychology, and applied behaviour analysis. She is interested in the conduct of implementation research to improve community access to evidence-based mental health interventions. She is focused on research that is responsive to the needs of her community and aligns with ongoing mental health initiatives. Her research interests include evaluating the effectiveness of brief mental health interventions, the use of professional task-shifting to increase access to mental health support, and the promotion of psychological flexibility in youth.



Dr. Bruni is a licensed Psychologist in the state of Michigan and is currently in the process of pursuing her registration in Ontario. She has maintained her behaviour analysis certification with the Behaviour Analysis Certification Board since 2011.



Dr. Melaine Goodchild

Academic Director, *Makwa Waakaa'igan, Algoma University*

Dr. Melanie Goodchild, Anishinaabe (Ojibway), moose clan, is a design and innovation strategist with over 30 years' experience working with First Nations communities. She is passionate about utilizing complexity-aware tools together with Anishinaabe gikendaasowin (our original ways of knowing) to support innovation at scale. Dr. Goodchild is from Biigtigong Nishnaabeg, Aroland, Couchiching and Ketegaunseebee First Nations and she resides in Bawating with her family.

Her practice has transitioned from applied sociology to Anishinaabe, decolonial and participatory approaches to better understand how to tackle complex systems challenges. With a Ph.D. in Social and Ecological Sustainability from the University of Waterloo, she has worked on transformative systems initiatives with other practitioners and scholars around the world. Melanie is a contributing faculty member with the Presencing Institute at MIT and the Wolf Willow Institute for Systems Learning. Research Interests: the nexus of systems thinking/complexity science and Anishinaabe gidendaasowin (our original ways of knowing), social and ecological sustainability, and participatory futures foresight.

Dr. Edward Turgeon

Professor of Music, *Algoma University*

and **Artistic Director** of *Great Lakes International Summer Music Institute*

Turgeon has won first prizes in major international competitions including the International Schubert Competition for Piano Duos (Czech Republic) and the Murray Dranoff International Two Piano Competition (Miami). Since 2000, he has performed hundreds of concerts with his wife Anne as a member of Canada's internationally acclaimed piano duo, the "Duo Turgeon", including at Carnegie Hall, Music Toronto, Yong Siew Toh Conservatory (Singapore), the Concertgebouw of Amsterdam, Krakow Philharmony Hall, International Pianistenforum Germany, San Francisco International Music Festival, and throughout Russia.



He has given world premiere performances of new works including a piece commissioned by Barbara Assiginaak, a daughter of a Shingwauk residential school survivor and Order of Ontario, and Order of Canada, for a multi-media work "Zhingwaak". It was one of the first Classical music compositions to have all written and performance indications in Anishinaabek, along with projected Anishinaabek and English translations during performance.

Turgeon has been heard on classical music radio stations throughout the world, including CBC's Arts National and Sound Advice, National Public Radio's "Performance Today", BBC, Australian Radio, and the PBS television documentary "Two Pianos – One Passion".

Research





Innovation in Rural Cultural and Creative Industries

Emerging observations are indicating that how innovation processes occur in rural areas differ from those in cities. In non-urban areas much of this innovation remains hidden because it falls outside the standard theories and metrics commonly used in economic studies. The project, IN SITU: Place-based Innovation in Rural Creative and Cultural Industries (2022-26) based in the European Union, brings together leading research approaches to economic evolution and diversification, processes of innovation, non-urban place-based planning, and entrepreneurship in creative and cultural industries to increase CCIs capacity to act as drivers of innovation, competitiveness, and sustainability in their local context.

As a member of the International Advisory Committee, Dr. Jude Ortiz participated in the webinar *How does cultural and creative work contribute to place-based sustainability and resilience?* Drawing on research she conducted in Northern Ontario Jude identified the interrelations between creative and cultural industries (CCIs) and the four pillars of resilience.

Place is a dynamic interplay between people, processes, structure and agency that is always 'becoming' through culture making and culture shifting, underpinned by relationship building with oneself and others in the context of the land/place. At an individual level, place is an internal space, and a shared space at a community level.

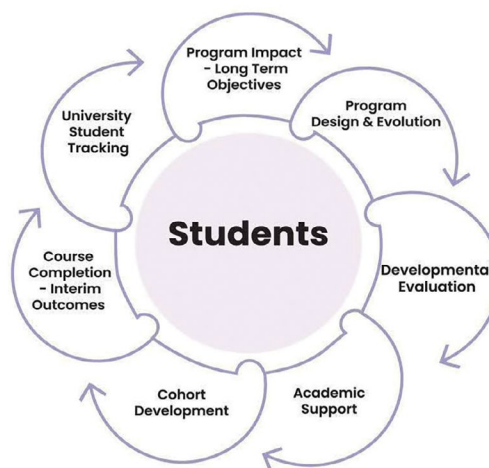
Resilience scales up from individual creative practice, to sectoral collaboration, to cross-sectoral collaboration through engaging with oneself and others. The arts provide the space and means, i.e., opportunities for interaction that support identity formation and sense of belonging, while simultaneously transforming materials into cultural products that contribute to quality of life, household income, and the development of localized culture-based economine that can link regionally and globally.

To date, the IN SITU project has published more than seven research reports, and hosted a number of capacity-building workshops, webinars and conferences.

Evaluating LEAP

LEAP Program – Theory of Change

Algoma University's Learners Early Access Program (LEAP) offers comprehensive support to equity-seeking high school students who have historically been underrepresented in post-secondary education. This program is designed to instill confidence that higher education is an attainable and promising path for their future. Historically, these groups have faced significant barriers that hinder their progression to post-secondary education. LEAP aims to bridge this gap by providing a seamless transition from high school to university for equity-seeking students, including Indigenous and Black youth, at Algoma University's Brampton campus.



To measure the program's impact, the NORDIK Institute, in partnership with Algoma University, conducted a comprehensive evaluation survey for the LEAP participants in Winter 2024. This study employed a 'Theory of Change' framework to design the survey questionnaire, exploring the mechanisms driving change and assessing the overall effectiveness of the program in these areas. The Theory of Change is used in program design and evaluation to map the logical sequence through which program inputs lead to desired outcomes, thereby exploring the process of change and the underlying mechanisms driving it to achieve the program's goals.

This assessment framework aimed to identify changes in organizational and participant capacity towards post-secondary attainment across four key domains:

- **Knowledge:** Enhancements in skills and capabilities.
- **Attitudes:** Shifts in perceptions and self-comprehension, including increased self-confidence.
- **Behaviors:** Changes in actions and responses resulting from participation, indicating what modifications individuals would implement.
- **Relationships and Networks:** The creation of new connections and support systems, expanding access to valuable resources.

The research team is currently analyzing and reflecting on the significance of the findings and their potential to enhance our understanding of the challenges faced by underrepresented students. This reflective analysis will inform subsequent actions, guiding decisions on refining evaluation questions, expanding student services, acquiring additional data, and engaging more partners effectively.

The evaluation of LEAP is led by the Director of Research, Dr. Tamanna Rimi, and Research Coordinator, Dr. Jude Ortiz, from the NORDIK research team, and funded by Algoma University.

Northern Ontario Labour Force Retention and Attraction in a Post-pandemic, Digital Economy

This research expands on a previous study at Algoma University and examines why post-secondary graduates in Northern Ontario either stay in the region or move away. The main goal of the research is to understand the gaps in the policies and identify the factors that can attract and retain recent graduates in the Northern Ontario cities and what more can be done to improve the needs of the community.

The study involves surveying current and recent graduates from the region's colleges and universities to identify the main factors influencing their decisions. It also includes focus groups with key stakeholders to understand how local policies on recruitment, job preparation, and market access affect these outcomes.

A total of eight educational institutions (Algoma University, Sault College, Laurentian University, Cambrian College, Northern College, Nipissing University, Lakehead University and Confederation College) participated in this research in five major Northern Ontario cities (Sault Ste Marie, Sudbury, Thunder Bay, North Bay and Timmins) wherein quantitative (Surveys) and qualitative (Focus Groups) analysis was conducted. Some of the secondary data that were collected were the number of Rural-Northern Immigration Pilot (RNIP) allocations in each city from 2019 to 2022 and the expected allocation of seats for 2023.

Currently the research project has completed all the survey and focus group data collection and it has moved to the next stage of analysis. The team hopes to complete the project by the end of this year and present its findings to the public. The findings will be used to analyze government policies related to labor markets and immigration, such as the RNIP and help the community in terms of identifying the factors that can assist to attract and retain immigrants in Northern Ontario and build the economy.

A new RNIP policy will be soon implemented in the coming year by the federal government after being a pilot program from 2019 to 2023. Hopefully this research will contribute to the renewal of this policy in a manner that supports robust immigration policy that contributes to Northern community resilience.

NORDIK Research Associate, Dr. Nusrate Aziz, led the development of a collaborative research initiative across Northern Ontario's five largest cities and four universities. Co-investigators include Dr. Sean Meades (NORDIK/Algoma University), Dr. Natalya Brown (Nipissing), Dr. Livio Di Matteo (Lakehead), and Dr. Sadequl Islam (Laurentian). Zeel Patel, initially a NORDIK NOHFC research assistant, continued on the project as a Senior Research Assistant, followed by Alexander Mirault and Kashfia Ashraf as research assistants. The team received a Social Sciences and Humanities Research Council of Canada (SSHRC) Insight Development Grant in the amount of \$72,000.



Global Decolonial Education

DECOLONIZING PEACE IN COLOMBIA

WEBINAR SERIES

English & Spanish Interpretation Available

This series of webinars advances a conversation between the international community, academia, as well as ethnic and social organizations from Colombia about how to decolonize peacebuilding theoretically and practically, by learning from the decolonizing peace process that has been advanced in Colombia via and since the ethnic chapter included in the peace agreement of 2016.

March 6th
8 AM Col
8 AM EST
From the 2016 Peace Accords and the Ethnic Chapter to Total Peace
Gustavo Vélez and Mary Cruz Rentería Ming of the (JEANPE) and Melquicedad Blandon Mena (PCN)
Moderated by: Sheila Gruner (Algoma University/IPTP)

April 17th
2 PM Col
3 PM EST
A Negotiation Between Worlds: Peace Negotiations of Ethnic Communities in Colombia
Daniel Ruiz-Serna (McGill University), María Campo (El Chontaduro Cultural Association) and Elena Hinestroza (Signer for Peace)
Moderated by: Cristina Rojas (Carleton University)

May 8th
4 PM Col
5 PM EST
11 PM CET
May 9th
9 AM NZST
Embracing Trouble: Confronting Racial Silence to Decolonize Peacebuilding in Colombia
A conversation with Mahdis Azarmandi (University of Canterbury) and María Cárdenas (Frankfurt University)

June 12th
10 AM Col
15 PM GMT
16 PM CET
The Necropolitics of Peacebuilding and Racialized Violence in Colombia
Krisna Ruethe-Orihuela (University College Dublin)
Moderated by: Ana Isabel Rodríguez Iglesias (University of Deusto)

Logos: Instituto de Estudios, Peacebuilding in Colombia, Algoma University, McGill University, ACELAC CALACS ACELC, Universidad de Deusto, Deusto, UC, UNIVERSITY OF CANTEBURY, UCD, Carleton University.

As part of the ongoing Global Decolonial Education initiative Dr. Sheila Gruner oversaw a variety of projects, planning, encounters and collaborations during the 2023-24 year between Canada, Colombia, Bolivia, Ghana, and South Africa. The project was supported into a second year by Project Coordinator, Kendall Mitchell.

Significant activities that build on previous years of work, included the Intercultural-Decolonizing Peace encounter that featured Indigenous and Black-Afro-Colombian leaders in delegation visit to Algoma

University (AU) in June 2023, which focused on decolonizing education, the parallels between Truth Commissions and reconciliation efforts in Canada and Colombia, as well as grassroots strategies to support survivors of Residential Schools. In follow-up, the IPTP invited AU leadership as part of a delegation to Colombia and Bolivia, in which multiple memorandums of understanding were signed between AU, IPTP, and partner institutions including the National University of Colombia (UNAL) and the Fund for the Rights of Indigenous People in Latin America and the Caribbean (FILAC). This visit also facilitated the consolidation of commitments to Diplomacy Between Peoples, the result of discussions and commitments to work between Indigenous and Afro-diasporic peoples from Canada, Colombia, and Bolivia.

Dr. Sheila Gruner presented at multiple events during the year. She was a panelist at two conferences (i) *International Forum: Crimes against Nature and Territory in the Context of Armed Conflict*, hosted by the Special Jurisdiction for Peace in Bogota, Colombia, and (ii) *International Meeting of Feminist Diplomacy for Peace* hosted in Bogota, Colombia; and presented at the 30th anniversary of the Black Communities Process (PCN) in Bogota, Colombia.

Another significant series of events included the webinar series, *Decolonizing Peace in Colombia*, done in collaboration with the Global Network-Ethnic Peoples and Peace and the Global Centre for Pluralism (GCP) which featured scholars, land defenders, and activists globally from Colombia, Germany, Spain, Ireland, Canada, and New Zealand on topics ranging from Peace Negotiations to Confronting Racial Silence to the Necropolitics of Peace.



Freshwater Perspectives and Sustainable Entrepreneurship

The Freshwater and Blue Economy Project for the Upper Great Lake Region is a community-driven, transdisciplinary research initiative that addresses freshwater health challenges and explores related social, economic, and cultural aspects. The research prioritized local engagement, including freshwater researchers, stewards, and organizations, who are vital for advancing sustainability and developing strategies for freshwater rehabilitation.

In 2023-2024, Phase 1 of the project was completed, which examined freshwater perspectives and sustainable entrepreneurship in the Algoma and Chippewa regions through surveys and a Water Arts project. Survey results highlighted concerns about water quality, invasive species, plastics, and financial and transportation barriers while revealing the potential for growth in recreation, tourism, water management, agriculture, clean growth, and fishing under the Blue Economy concept. The Water Arts project involved teachers, community members, students, and artists in creating public art to raise awareness and promote freshwater health.

The research adopted a multifaceted approach, including the following outreach events: World Water Day, the Water Wise online conference, Water Arts events, annual shoreline clean-ups, and a water ceremony in partnership with Shingwauk Kinooamaage Gamig. These efforts aimed to gather insights, build relationships, and raise awareness about freshwater issues.

Phase 1's findings set the stage for Phase 2 (Algoma University-SMCTA Fund), focusing on strengthening intersectoral relationships between First Nations, educators, scientists, and climate action groups. This phase aims to develop a locally informed freshwater strategy that addresses Truth and Reconciliation Calls for Action and incorporates both Indigenous and Western scientific perspectives.

Dr. Jody-Lynn Rebek and Dr. Ahmed Aziz lead the research, supported by NORDIK research intern Hannah Caicco, MITACS Graduate Research Intern Alejandra Pacasqua, and student researchers from Algoma University's BRIDGE research lab. Cheryl Jamieson and Shingwauk Kinooamaage Gamig also played a crucial role in supporting the project.



Supporting the Forest Industry to Detect and Manage Spruce Budworm Outbreaks

Jennie Pearce, of Pearce & Associates Ecological Research, have recently completed the first year of a three-year project that aims to develop an automated mapping tool to identify and track mass dispersal events by (eastern) spruce budworm (SBW, *Choristoneura fumiferana*) using Environment Canada's weather radar stations. The SBW is a native moth that feeds on balsam fir and spruce. During outbreaks, mass dispersal flights result in the rapid spread of SBW and the creation of new epicentres of tree defoliation and death.

Previous studies have shown that these dispersal events can be detected by weather radar stations, and may be mapped as "rainfall" events. During the first year of this study an R-based toolkit was developed to read raw radar data recorded at Environment Canada's weather radar stations, remove background noise from the radar data (such as precipitation and ground clutter), leaving signals likely attributable to SBW. The project is currently using historical observations of SBW mass migration events to evaluate the performance of our toolkit.

Little is known about the environmental triggers that initiate mass dispersal by SBW or how frequently these events occur during an outbreak. In Year Two of this study the newly developed toolkit will be used to scan daily historical radar data (2013 to 2024) to search for SBW dispersal events, and relate these to prevailing weather conditions prior to, and during, dispersal. The long-term goal is to provide early warning of new SBW epicentres outside of the known outbreak area. This early warning will help focus monitoring and eventual spraying to control increasing spruce budworm populations.

Upper Great Lakes Community Ecosystem Monitoring

The start of something big!

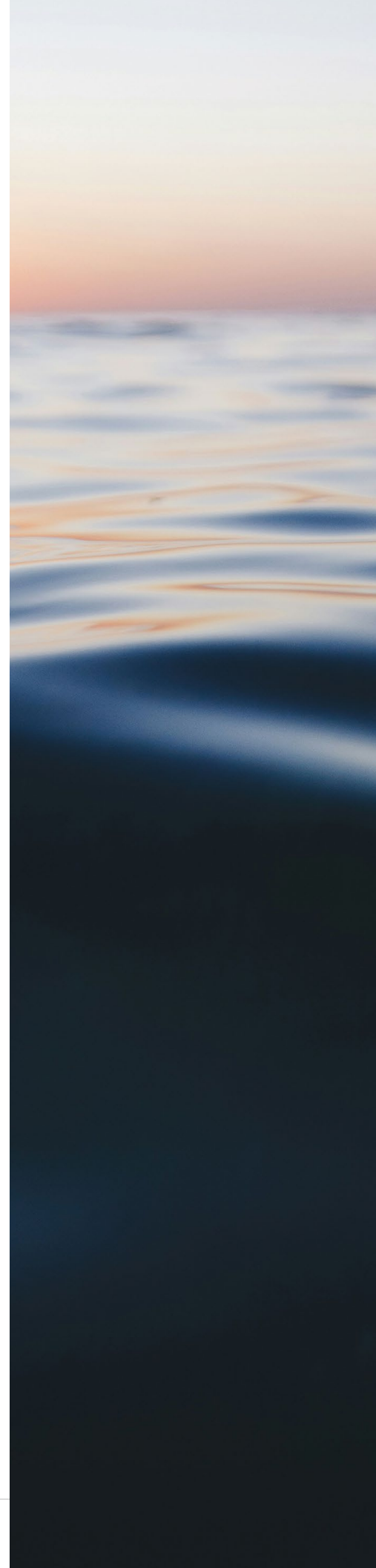
The Upper Great Lakes Community Ecosystem Monitoring project aims to increase the capacities of project partners to monitor the state and health of waters, and coordinate continued monitoring efforts from past projects, explore opportunities to provide diverse benefits from community data, and innovate public engagement approaches. There are three sub-projects involving 15 collaborating organizations.

The Missanabie Cree First Nation Community-based Monitoring sub-project began in 2023. A Missanabie Cree youth was hired to monitor water quality at five sites in the territory, in addition to supporting many other objectives in the region (e.g., programming at youth camps, engaging in aquatic invasive species management).

The Sault Ste. Marie Water Rangers Task Team kicked off in February 2024 with the training of its first cohort of volunteers. They began monitoring local waters in March, with more volunteers signing up to participate each month. The early success of this project attracted the attention of the Provincial Water Quality Monitoring Network (under the Ontario Ministry of Environment, Conservation, and Parks), which invited NORDIK to become its first non-government partner in 60 years of water quality monitoring. NORDIK's staff and volunteers are now able to collect water quality data that is directly accessed by Ontario decision-makers. We look forward to expanding our reach to fill large water quality data gaps across Northern Ontario.

A shoreline cleanup event is scheduled for July, 2024. The development of a mobile application to track and measure shoreline litter was generously offered in-kind by Swim Drink Fish.

Two full-time staff members – Kiki Vetri and Ajaz Shaikh – are implementing these projects under the leadership of Dr. Elaine Ho-Tassone. Dozens of Algoma University Biology interns and community volunteers have supported the project. This project is funded by the Government of Ontario and the City of Sault Ste. Marie.





Aki Kikinomakaywin

The goal of Aki Kikinomakaywin was to build the confidence of Indigenous youth in attending university and/or college by creating a culturally grounded Indigenous-led, land and water-based STEAM (science, technology, engineering, art, mathematics) program for Indigenous youth ages 14-16 in Northern Ontario, through weaving together Indigenous and western knowledge systems. This project was led by Research Associate, Dr. Haley MacLeod, and Lydia Johnson, a previous NOHFC intern.

The one-week program was held primarily at Lakehead University in Thunder Bay, ON with excursions to Fort William First Nation, Confederation College, and the School of Indigenous Learning along the shore of Lake Superior. Youth participants from First Nation communities from the northern shores of Lake Huron and Lake Superior, as well as communities north of Thunder Bay. In total, 57 youth from more than 17 different communities across Ontario, multiple locations in Southern Ontario and the far north, and one applicant from Manitoba participated. Each year, eight Indigenous staff members were hired to run the camp.

Over the course of the week, youth learned numerous Anishinaabe cultural teachings, including the seven grandfather teachings, water songs, and traditional

medicines. Each day began and ended with a smudge and a sharing circle. The hands-on western science activities focused on learning about monitoring water quality and the various anthropogenic activities impacting freshwater resources.

The large number of applicants of all ages and from a large geographic area indicates the interest in, and need for, this type of culturally relevant educational programming. Year-end surveys indicated youth felt closer to water and their culture, and many indicated they were more interested in attending university or college after participating in the program. However, staffing costs, due to the intense nature of the program, were largely prohibitive to continuing this valuable program. Additionally, the project faced challenges with maintaining continuity of staff between years.

Partners included Algoma University, Canadian Geographic, Biinaagami, Confederation College, Four Rivers Environmental Services, Laidlaw Foundation, Lakehead University, Let's Talk Science, Mamaweswen Tribal Council, Matawa First Nations, Nijjii Mentorship Program, NOHFC, Sault College, The School of Indigenous Learning, Water First, Thunder Bay Art Gallery and NSERC PromoScience.

GLOCAL

Global Mindsets for Local Regenerative Futures

The urgency of global unsustainability necessitates innovative leadership interventions that focus on both inner and outer transformation. Glocal aims to address the pressing issues of regenerative sustainability for both human and planetary health by catalysing meaningful change. It offers an integrative and interactive program that fosters regenerative approaches to leadership development.

Current literature lacks a comprehensive understanding of how intrapersonal leader development training, including psychological flexibility, and relational systems thinking, influences sustainability behaviours and practices. A systematic mapping of existing research at the nexus of inner and outer transformation is critical to inform future interventions. It focuses on programs such as Acceptance Commitment Therapy (ACT), the Social Change Model, and other inner-outer transformative pedagogies that promote sustainable, regenerative leadership.

An intervention has been drafted, along with the approval from the Research Ethics Board (REB), and informal partnership agreements between multinational corporations have been completed. Once the scoping review is complete, the intervention will seek student and leader participation in an eight week virtual program.

The project is led by Dr. Jody-Lynn Rebek from the Faculty of Business and Economics, Dr. Teryn Bruni from the Department of Psychology, and Dr. Kira Cooper a Postdoctoral Research Fellow at the University of Waterloo. James White was hired to support the development of this project. Recent hires include Enid Wyper-Haig, Tim Van Weerden, a lab coordinator, a post-doc, and a NORDIK intern who will support further progression of this project (Algoma University-SMCTA Fund).

Trade Area Analysis for the Sault

This project focused on a comprehensive analysis of the trade area for the retail businesses of Sault Ste. Marie to answer the question, “*Where is Sault Ste. Marie’s retail business trade area located?*” Through this question, the study aimed to determine the spatial distribution and the characteristics of the trade area using a multifaceted approach that combines the drive time method, focus groups, radial analysis, and geographic information system (GIS) software. The research provided valuable insights for local businesses, policymakers, and researchers, informing location decisions, market analyses, and strategic planning.

The analysis revealed that Sault Ste. Marie’s trade area extends from the city itself to neighboring areas within a specific drive time threshold, ranging from 143 km to 410 km with drive times of about 99 minutes to 260 minutes between secondary and tertiary trade areas. The study contributed to the literature on trade area analysis and its implications for urban development and economic planning, with particular relevance to mid-sized cities in comparatively remote locations. The findings highlighted the economic vitality and trade opportunities in Sault Ste. Marie, emphasizing its competitive advantages, access to customers, and the community’s flourishing research and development sector. The research methodology and findings can serve as a framework for analyzing trade areas in other regions, offering a broad understanding of retail trade and its spatial distribution.

Muskaan Premji worked on this project under the supervision of Dr. Nusrate Aziz and Dr. Sean Meades.

Batchewana First Nation Education Wellness Project

The Batchewana Learning Centre (BLC) is dedicated to promoting the mental health and holistic wellness of Indigenous youth through culturally responsive and evidence-based programming. Our approach integrates historical trauma programming, group therapy, and individualized counseling that acknowledges the unique challenges faced by Indigenous youth and their communities. Despite these efforts, the BLC has identified a pressing need for an effective mechanism to effectively identify students at risk early and evaluate student outcomes. Current screening tools inadequately serve Indigenous youth, often being lengthy, cumbersome, and lacking cultural relevance. Existing measures commonly overlook the strengths and resilience of Indigenous populations and fail to account for the complexities of their lived experiences.

The Hope and Healing project is the first phase of a multi-phase initiative designed to create, validate, pilot, evaluate, and implement a scalable screening program for Indigenous youth. This phase focuses on developing and piloting a brief, culturally relevant, and gender-inclusive assessment tool that evaluates emotional, physical, and spiritual wellness, emphasizing resilience and cumulative stress. By strengthening our understanding of their well-being and enhancing the efficacy of intervention programs, this initiative will promote resilience and foster a healing journey for Indigenous youth, ultimately driving positive mental health outcomes in our community.

A draft of the screening tool has been developed using the Medicine Wheel as a framework for youth wellbeing. The tool is strength based and designed for youth to complete directly. Questions have been drafted under each Medicine Wheel domain and these questions are currently being reviewed, edited, and modified by experts, youth, and community members. Domain definitions will be further shaped by youth interpretations of medicine wheel domains expressed through a youth photovoice project.

A community feedback session is currently in the planning stages and we have a meeting with the lead researcher for the Aboriginal Children's Health and Wellbeing Measure to plan validity studies with existing measurement tools.

The success of the project is deeply rooted in meaningful community engagement, shaping the evolution of this vital tool. A final report will be submitted to the funding body, summarizing achievements, challenges encountered, and insights gained throughout the project. The research is led by Dr. Teryn Bruni, Eva Debutch, and Dr. Jody-Lynn Rebek. NORDIK supported the project at its initial stage.

Development





Community Support Team: Developing a supportive network for recovery

Mino Bimaadiziwin, a Mental Health and Addictions funded initiative, enables the Children of Shingwauk Association (CSAA) to conduct an environmental scan of Indigenous-led and culturally centred programs, services and workshops that have been successful in providing support to those impacted by Indian Residential Schools to journey to recovery from mental health and addictions. The scan will assist in developing a network of health authorities, Knowledge Keepers and Elders, on and off reserve, within the Algoma District in Northern Ontario. The one year project, with possible funding extensions, began in April 2024.

An in-depth literature review will be created as a living document to capture past and ongoing Indigenous-led, culturally centred programs in Northern Ontario. This is intended to ensure that a strength based approach is taken to highlight the warrior work that tends to be overshadowed by the impacts of colonialism, which should not be ignored but cannot remain the beginning of the narrative for Indigenous people in Canada. This living document will provide insight and serve as a framework to track and record the ongoing success of our Indigenous communities, organizations as well as our non-Indigenous allies.

The project has three phases:



Phase 1: Determining what services are available

Outreach information packages have been distributed and engagement activities including virtual and in-person presentations and meetings are underway. Three two-day outreach roundtable discussions and workshops with local and regional Indigenous communities and Indigenous and non-Indigenous organizations were designed to surface available and successful services. We found that community visits were more effective in providing opportunities to engage in knowledge sharing.



Phase Two: Identifying gaps in service provision and resources needed

To ensure transparency and accountability to the communities impacted by the Shingwauk Residential School, as well as the Unmarked Burial process, community engagement needs were aligned with the timelines and availability of Community Health Leads. During the visit from Taykwa Tagamou First Nation were able to connect with Ozawa Ginew to host the ceremony, and visit Turtle Concepts, the Dan Pine Healing Lodge and Shingwauk Kinoomaage Gamig. This provided an opportunity to share and gain insight into ongoing initiatives that continue to have a positive impact on community members. We also received the gift of meeting one of the 13 Prophecy Grandmother's, Margaret Gettay, who is an IRS Survivor, artist, storyteller and Arapaho language speaker from Montana. She shared her story of healing through culture.



Phase 3: Wellness Summit

The CSAA and the Community Support Team is now in the process of planning a three-day Mental Health and Addictions Summit to be held October 15-17, 2024. This will include guest speakers from the Ministry of Indigenous Affairs Ontario and the Minister of Mental Health and Addictions as well as other local and regional stakeholders and partners. There will be youth/elder workshops, Indian Residential School Survivor Trauma Training and a Kairos Blanket Exercise. The summit will provide an opportunity to deliver a comprehensive report that will include key findings, and a proposal for ongoing commitment and investment from all stakeholders to continue to support health and wellness in Northern Ontario, by and for, Indigenous communities.

Growing a New Economy Through Social Entrepreneurship

Elizabeth MacMillan and Amy Boyer of NORDIK Institute have been working in partnership with Keepers of the Circle to create and facilitate Social Entrepreneurship programming for Indigenous women and non-binary people aiming to address community needs through business solutions. The holistic approach to learning combines the practical skills of business development with select teachings and wisdom of Anishinabe culture. Over the year several cohorts participated in the introduction and intermediate level classes with more than 20 social entrepreneurs successfully completing the training preparing them to take the next step in their entrepreneurial journey. Another round of programming launched in September 2024.



Bridging the Gap: Social Finance for Indigenous Food Systems

CCEDNet's Investment Readiness Program - Awareness Raising Fund supported NORDIK, the Ontario Native Welfare Administrators Association (ONWAA) and Rural-Agri Innovation Network (RAIN) in delivering a series of workshops designed to increase awareness

of social finance within Indigenous communities, and social purpose organizations interested in food systems, in particular. The workshops introduced the concept of social finance, pros and cons, potential partners, types of social finance tools, the development process and sources of social finance.

The first workshop was delivered at the annual ONWAA conference in Toronto, followed by a series of regional trainings in Winnipeg, Thunder Bay, Algoma that were facilitated through Nahmah Miigwan Services. The regional training strengthened informal partnerships between communities and social enterprise leaders, and increased formal partnerships by combining training with existing opportunities. Although the regional training was delivered through Zoom, due to cost of travel, workshop content was shared and individuals were connected with support organizations.

The training revealed that there were only a few social purpose organizations (SPOs) interested in making an impact through social finance. In Northern Ontario this gap is even wider when compared to urban centres. There is a need to support the few social entrepreneurs/SPOs who are working to scale their impact. There was a lot of interest in the Community Driven Outcome Contract (CDOC) currently being utilized by Raven Indigenous Capital Partners. It is a model where investors are invited to finance a relevant intervention and commit to pay for its observed effects. Supporting First Nations communities with building their capacity to better understand the social finance landscape as it pertains to Community Driven Outcomes Contracts (CDOCs) is necessary in advancing the field. Greater collaboration in communities between the social service, health, and economic development teams at the community level and regional (Tribal Council) level would assist in realizing how CDOCs could play a significant role in community transformation.

Thank you to NORDIK Institute partners and funders:



Northern Ontario Research, Development, Ideas and Knowledge Institute

1520 Queen Street East Sault Ste. Marie, Ontario P6A 2G4

www.nordikinstitute.com



Research, Dialogue, Analysis and Reflection

Northern Ontario Research, Development, Ideas and Knowledge Institute

1520 Queen Street East Sault Ste. Marie, Ontario P6A 2G4

www.nordikinstitute.com