Enhancing Education How some Yukoners are thinking outside conventional classrooms to open up learning opportunities By KC Hoard

Rivers to Ridge:

Society is made up of a diversity of learners whose abilities, interests, learning style, energy level, worldview and lived experiences are unique.

Yukon entrepreneurs are providing educational tools and experiences that expand upon the classroom experience and offer complementary educational options. These businesses address specific needs by helping students develop key skills and competencies – from curiosity, creative problem solving, and self-directed learning, to literacy, numeracy, and understanding of the natural systems around them. Working in tandem with the school system, these businesses aim to meet the needs of a diverse range of learners.

Tara Fallat is one such person. Fallat, a Whitehorse-based private tutor, has been helping children succeed in school for years. She specializes in preparing elementary-aged students for high school – particularly students with circumstances out of their control that hinder their ability to thrive in school environments.

SDG # 4: Quality Education

The <u>United Nations Sustainable Development Goal (SDG) #4</u> calls for free, equitable and quality education. Targets focus on learning outcomes like literacy and numeracy; completion of secondary school; and equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, Indigenous peoples, and children in vulnerable situations.

For more information on the UN SDGs, visit www.un.org/sustainabledevelopment



Fallat works with students of all ages in Whitehorse, many of whom have recently moved from rural Yukon communities. Her client base is both Indigenous and non-Indigenous. On a curriculum level, Fallat generally finds these students need the most help with math and she believes the problems run deeper than equations.



"If students have barriers to learning, such as learning difference, or do not feel welcome or respected in the school community, the gaps often worsen."

Tara Fallat, private tutor

Fallat is dedicated to setting students up for success regardless of their starting point. By working one-on-one with students, she is able to address their individual learning needs, helping to close gaps in subject matter knowledge and build pride and confidence in their own abilities. These are foundational elements that will continue to compound, affecting these individuals' access to opportunities throughout their lives.

The Auditor General of Canada's 2019 report on education underscores the role of education in creating lifelong opportunities:

"Education affects both the individual and [society] as a whole. Well-educated citizens are more likely to be productive, healthy, and participating members of society and communities. With limited education, an individual faces fewer opportunities for jobs and civic participation. Therefore, it is critical that the education system work well for all students."

Auditor General's Report on Education (June 2019)

There is more international pressure than ever before for governments to meet the educational demands of the most vulnerable fragments of their populations. In 2015, all United Nations member states – Canada included – signed on to the Agenda for Sustainable Development. They agreed to meet 17 Sustainable Development Goals (SDGs) – goals designed to "end poverty, protect the planet and improve the lives of everyone, everywhere." These goals cover topics as broad as world peace and as essential as a guarantee for decent work.



The fourth of the United Nations Sustainable Development Goals (SDGs) addresses quality education. It calls for "free, equitable and quality primary and secondary education," and achievement of learning outcomes such as literacy and numeracy, universal completion of secondary school, and equal access to education for the vulnerable, including persons with disabilities, Indigenous peoples, and children in vulnerable situations. It's a purposefully aspirational and ambitious goal that has no guarantee of success, but it's one many Yukoners are working towards – not just in the public education system, but in private businesses as well.

4.4 – By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

Derrick Hastings is one of those Yukoners. Hastings is the manager of the Tr'ondëk Hwëch'in Working and Teaching Farm, a sprawling 80 acres of land located in Dawson City. The "working" component of the farm is ambitious – Hastings and a small team of about 20 farmers grow just about every root vegetable and leafy green you could imagine and tend to a wide variety of livestock.

But it's the "Teaching" aspect of the farm that's really special. At any given time, The farm employs about ten youth – primarily First Nations citizens – to learn the ropes of running and maintaining a large-scale farm. The students are paid for their work, and get to learn a valuable skill – agriculture – that could lead to a career for them. The program also provides increased access to produce and meat for their communities, which are often rural and isolated from grocery stores and farmer's markets that are taken for granted in more connected parts of Canada.

For Hastings, the farm presents learners with opportunities for validation and fulfillment they might not be able to access otherwise. It's intended to fill gaps in the standard education system in a way that's comparable to Fallat's work. But where Fallat uses one-on-one tutoring, Hastings uses the principles of Indigenous land-based knowledge to improve upon the teachings Dawson City's youth have received. The hands-on applied learning works well for some students whose learning styles are not well served by a classroom environment.

"They have a sense of work ethic," says Hastings. "They have a sense of pride and relationship to the land. I can see how it connects them and gives them a broader perspective."



The TH Working and Teaching Farm outside Dawson City offers hands-on, experiential learning to grow students' pride and confidence through applied knowledge and practical skills.



4.7 – By 2030, ensure all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's

contribution to sustainable development.

As a journalist and an educator, Kanina Holmes' quest is to do her part in mending the information gap between Indigenous and non-Indigenous people. For her, the best way to get started was by empowering and educating young journalists about Indigeneity and how to report on it.

That's the animating force behind Stories North, a program for journalism students that Holmes launched in 2017. Stories North participants spend upwards of a month in Yukon, learning about the various First Nations that live in the territory and forming relationships with Indigenous peoples.

Following workshops, excursions and field experience, they are expected to produce a multimedia piece of journalism that illuminates an issue faced by Yukon First Nations citizens.

Stories North is intended to supplement traditional journalism school – which mainly teaches the basics of reporting – with on-the-ground lessons about humane and compassionate reporting. The program seeks to enhance the quality of young journalists' education by teaching them how to report with Indigenous peoples – and on underserved communities more broadly.

Forty-two students have gone through the program in three years. Through Stories North, Holmes has seen the power of what she calls "place-based transformational learning." Still, she feels the initiative can do even more to bridge gaps between Indigenous peoples and non-Indigenous journalists.

"I don't think an initiative like this is complete until we start building capacity here in the North for young people who want to become journalistic storytellers," says Holmes. "For me, the evolution of Stories North means trying to inspire people here who have stories to tell to help them tell their stories in their own way."



"My dream is to give people here access to the kind of education and training that students in the south have."

Kanina Holmes, founder, Stories North



Others, like Erin Nicolardi and Emily Payne, are working to build capacity for Northerners to grow and learn in northern ways. Nicolardi and Payne are co-founders of Rivers to Ridges, a Whitehorse-based early childhood education initiative that puts land-based learning front and centre. It all started during a backpacking trip when the two bonded over their shared love of learning on the land.

"We both came from backgrounds in teaching and education, and we both felt there was a lot of emphasis on recreational and hard skills-based outdoor pursuits," says Nicolardi. "We both wanted to contribute something to the field of education that would have a softer focus on personal connection to place, community connection to land, and awareness of the other human beings we share the earth with."

The pair decided to make that type of learning accessible to young Yukoners by creating Rivers to Ridges. The driving philosophy behind Rivers to Ridges is "nature mentoring," which seeks to orient young children in their natural space by immersing them in the outdoors. Rivers to Ridges provides programming that teaches children a number of outdoor skills, including foraging, fire-building, and bird calls. For Nicolardi, it's also an opportunity to immerse children in the Indigenous roots of the land they live on.

"We're just trying to go slow – but not too slow – to forge meaningful relationships and tend to them well."

The focus is on highlighting local Indigenous knowledge in the community in which the program is taking place by working with Elders and knowledge holders to design, review, implement and facilitate programming."

Erin Nicolardi, co-founder, Rivers to Ridges

The team is also working to build capacity within those communities for sustainable development. For example, they have been working on curriculum about the Southern Lakes caribou herd. Nicolardi calls the Southern Lakes Caribou Recovery Program "a massive community success story" and believes teaching children about how to interact with the herd on a sustainable basis is important to support that effort.

Rivers to Ridges promotes curiosity, problem solving, and respect for sustainability through "nature mentoring" and partnerships with local, Indigenous knowledge holders.

Rivers to Ridge



Rivers to Ridges' intent is to supplement what students learn in school with experiences that teach them about where they live, why they live there, and how they can share their space with nature. According to Nicolardi, the lessons learned in Rivers to Ridges teach children curiosity about their surroundings and practical problem-solving skills that both enhance their understanding of the world they live in and show them how to apply that understanding to everyday situations.

"We have kids that are able to walk barefoot in the woods. They see themselves as celebrated in their curiosity. I don't think a lot of educators get to do that."

Erin Nicolardi, co-founder, Rivers to Ridges

NatureTot

NatureTot is a Whitehorse-based business that uses Montessori education principles to bring nature to young children.

"Hi, I'm Leet Mueller – the founder of NatureTot. I've been a teacher for over 25 years and a Montessori early childhood educator for half of that. I have noticed that many children – especially urban children – have limited experience of nature. Perhaps they are in childcare full time, or cold or hot weather keeps them inside, or there is a lack of materials.

Yet I believe contact with real nature can be provided to all students in simple yet profound ways by using Montessori methods. They learn about cycles of nature, how they are personally interconnected with nature, and how to sustain themselves and the planet's natural systems. Montessori teaches that "Children acquire knowledge through experience in the environment." That is why I started NatureTot: to provide parents and educators with guidance and thoughtfully prepared lessons that facilitate children's learning through nature, regardless if they have access to on-the-land learning..

In my observation, the benefits of hands-on and nature-based learning are profound for any child and especially for children who have a harder time fitting into a traditional classroom. I have seen disruptive children transform into examples of focus and calm activity when engaged with planting and harvesting. As the teachings of Montessori state, "The hand is the instrument of intelligence. The child needs to manipulate objects and to gain experience by touching and handling."

Montessori-based practical life activities provide the independence children really want. There are problem-solving opportunities and the child is engaged in learning life skills. These activities develop a feeling of competence in the child that develops into healthy self-esteem as they grow up.

NatureTot is beginning its journey as a YouTube channel, giving educators and parents the tools, resources and skills to help bring nature to children under six. I find it extremely rewarding to help parents learn how to facilitate their child's learning, growth, curiosity, and independence and I am dedicated to providing this opportunity to all children, regardless of their location or circumstances."



Nicolardi and Payne are taking Rivers to Ridges one step further – by opening a school. The Nest Forest School is a physical childcare centre anchored around the same philosophy that guides Rivers to Ridges. Nicolardi is looking forward to creating a physical space where children can learn about their place in nature.

DISCOVELO

While other entrepreneurs are expanding education beyond the classroom, the team at DISCOVELO is working to help students and teachers make the most of their experience *inside* the classroom.

DISCOVELO is a social purpose company working to create virtuous cycles.

By pairing physical movement with digital media, DISCOVELO helps students regulate excess energy so they can learn and think in harmony with their friends and teachers.

In partnership with Run for Life, a not-for-profit that has distributed thousands of stationary bikes to classrooms across Canada, DISCOVELO has built on existing brain science and consultations with teachers to develop an interactive learning app that engages students in physical activity on the bike and provides feedback to help students learn and enhance their emotional self-regulation.

"For decades in schools – as kids ourselves, then as parents and allies of teachers – we watched a circular pattern endlessly spin: A restless child with no outlet except noisy chatter or a staccato squirm. A frustrated teacher short on resources and patience. A distracted class, drained of its focus and potential. There'd be calm, for a time, but then another eruption, sparked by what we dismissed as naughty kids choosing chaos over self-control. But more recently, we've come to understand that children aren't choosing to be bad. And we know, in our hearts, that they deserve the same chance at success and growth as everyone else."

DISCOVELO's gameplay is rooted in universal curriculum: the United Nations' Sustainable Development Goals. The company is aiming to build young citizens who will actively advance – in the game and in their lives – the world's most crucial social ambitions.

DISCOVELO's apps also arm teachers and administrators with data on students' moods, energy, and physical exertion, which helps them to precisely manage their classrooms.

"At DISCOVELO, we see kids' energy spinning into focus and mindfulness, through to newly empowered teachers and around again to positive, happy classmates. As the wheels turn and turn, the chaos we once knew evaporates. In its place, we see something worth moving toward, something close to real resilience."





4.6 – By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy

For Fallat, change can come through programs or initiatives and it can also be produced through one-on-one interactions. That's what she does best as a tutor.

Fallat emphasizes mastery of concepts in her work with students. In this philosophy, she is aligned with the on-the-land, experience-based approaches of Holmes, Hastings and Nicolardi who also count mastery as a key tool in administering quality education.

When a student has the opportunity to master a concept and really understand it, that will reduce anxiety and increase confidence."

Tara Fallat, Private Tutor

Fallat herself experienced trouble with math in school, and wants to help students understand and even enjoy it. She believes in the power of fostering numeracy and literacy in students – not only because they need it to graduate from one grade to the next, but because it does wonders for self-esteem. "I really love being that person that can help," she says.

"Math is not the most important thing in the world. They don't have to like it, but if I can help them experience success in something that they thought they couldn't do, that's very rewarding."

Though the United Nations' SDG #4 sets ambitious goals and targets, folks like Fallat, Hastings, Nicolardi and Holmes are steadfast in their commitment to foster a love of learning in and about the Yukon, and to provide opportunities for all learners to thrive.



Yukon entrepreneurs are contributing to diverse learning opportunities for students of all ages and needs.





Experiential education offers opportunities to apply knowledge, making abstract concepts concrete.

About the writer

About the editor

Kanina Holmes is a Whitehorse-based journalist, editor, professor, and entrepreneur. She is the founder and creative lead of Stories North, a journalism education business responding to the Truth and Reconciliation Commission (TRC) by equipping journalism students with the skills to respectfully share stories from the North. Learn more at <u>storiesnorth.com</u>.

#UnkonBusinessesforGood

About this storytelling series

#YukonBusinessesForGood stories highlight some of the many Yukon businesses who create benefits for their communities and environment. The stories show how business can play a positive role in addressing shared values that have long been held by many Yukoners and now form the United Nations Sustainable Development Goals (UN SDGs): global priorities from 2015 to 2030 for 192 countries, including Canada.

This series also showcases young writers in Canada's North and provides them paid experience as they begin journalism careers, thanks to funding from Employment and Social Development Canada (ESDC).

About YukonU Innovation & Entrepeneurship (I&E)

We support Yukon-based innovators and entrepreneurs with funding, resources, expertise and incubation. For more information on how we can help you, visit <u>YukonU.ca/innovation</u> or email innovation@YukonU.ca





