McKENNA INSTITUTE

IMPACT REPORT 2023-24

CONTENTS

$50+ MILLION RASED TO DATE

$6 million
raised to date in support
of the Research Institute in
Data Science and Artificial Intelligence

$3 million
committed to rural digital transformation,
and equity and diversity initiatives

$1.8 million
in scholarship funding received

$310,000
awarded in scholarships to date

20+
ongoing projects

1,200+
registered users of IBM SkillsBuild
through the McKenna Institute

2,500+
followers on social media

ACADEMIC GROWTH THROUGH THE FACULTY OF COMPUTER SCIENCE

42%
increase in student
participation in
co-op program

27%
graduate
student growth

25%
undergraduate
student growth

1,000+
students enrolled
in computer science

"WE HAVE BEEN ABLE TO DO INCREDIBLE THINGS IN THE PAST THREE YEARS AND OUR MOMENTUM IS ONLY GROWING."

A MESSAGE FROM OUR FOUNDER

Changing an entire province's economic trajectory doesn't happen overnight but thanks to the strength of our partners it is easy to see our collective hard work paying off. This report shows the talent and determination that you and our other incredible supporters possess, and how that resolve is having a tremendous impact on projecting New Brunswick's digital economy forward.

The support of partners, donors and advocates like you is what makes that ambition a reality. Your impact, whether you joined our mission early on or are a new donor, is being seen across the province of New Brunswick.

We are continuing to build a robust talent pipeline so that the next generation can thrive in a digital economy.

The Institute has made large commitments in digital education, artificial intelligence (AI), digital entrepreneurship, digital agriculture, digital health and data science. We are embracing online learning with more than 1,200 registered users on our IBM SkillsBuild platform. We are strategically working with our educational partners to build a comprehensive rural strategy that will propel our province forward.

I want to thank you for your continued support of the Institute and your belief in our mission.

With your support, we have been able to do incredible things in the past three years and our momentum is only growing with more announcements to come. Thanks to partners like you, the McKenna Institute and UNB are leaders in transforming New Brunswick's future.

It is not possible without you.

THE HON. FRANK MCKENNA, PC OC ONB KC

OUR TEAM

Meet our team members at the McKenna Institute who work with our donors and partners to achieve our collective goals.

ADRIENNE OLDFORD
Executive Director

MELISSA O'ROURKE
Associate Executive Director

LISA JOHNSTONE
Executive Assistant

LIAM FLOYD
Communications and Events Officer

JOSH WAITE
Director of Development

ABBY DAVID
Strategic Program Director

LYNNE FAUGHT
Strategic Program Director

GINETTE GAUTREAU
Strategic Program Director

TUSHER SAMADDER
Digital Success Coordinator
IBM SkillsBuild

DAVID ITOAFA
Digital Success Coordinator
IBM SkillsBuild

JHANVI JOSHI
Digital Success Coordinator
IBM SkillsBuild

JEFF WRIGHT
Executive Director
Development and Donor Relations

CRAIG POOLE
Associate Director, Campaigns
Development and Donor Relations

EXECUTIVE DIRECTOR'S MESSAGE

Since the McKenna Institute was founded in 2021, our mandate of accelerating talent and ideas to drive economic growth in our province has been our guiding principle. By focusing on technology adoption in key sectors that are critical to New Brunswick's economy, like agriculture, entrepreneurship and health, we have been able to work on projects that push that mandate forward.

Now in our third year, it's exciting to be able to celebrate the successes that have come out of that strategy and the impact it's having on our province, with more than 20 ongoing projects.

In education, we have several initiatives to celebrate. We are engaged in work with partners in the K-12 francophone and anglophone school districts, with a particular focus on rural areas. We're bringing together students and parents with partners like Brilliant Labs and the universities. The goal is to help parents see what is happening in schools, how they can support digital education, and show them the kinds of programs and tools that are available to students.

The New Brunswick pilot of the federal ICTC Cybersecurity Training and Work Integrated Learning program, involving the faculty of computer science at UNB and the New Brunswick Community College School of Information Technology, graduated its first cohort and has begun recruiting for the next. The program offered the opportunity for female and non-binary students to become Microsoft Certified in Cloud Security, Network Security and a unique certification on artificial intelligence in cybersecurity.

The Institute also believes in fostering innovation through research, development and collaboration with other universities and the private sector, driving technological advancements.

We've established fellows and chairs at UNB to advance research critical to the development of

the economy and society: the Barrett Chair in Entrepreneurship for Digital Transformation; the McKenna Fellow in Digital Education; and the Wilson-McKenna Fellow in Digital Sustainability and ESG.

There is also the newly formed Research Institute in Data Science and Artificial Intelligence at UNB to capitalize on a rapidly growing part of the global economy. The MedTech conference we co-hosted in the fall with Université de Moncton was a huge success that led to funding research to change the delivery of primary health care to those who need access.

The Institute is also stimulating economic growth by aligning education with industry demands, attracting investment and facilitating workforce development. UNB is working with IBM Canada to provide free access to education and career readiness resources to students and businesses so people can learn the skills they need to fill digital jobs across the province.

The Institute has partnered with Thales, a global cybersecurity and defence company, to develop the Canadian National Digital Education Centre at UNB. The Centre will eventually employ more than 100 skilled workers in Fredericton and will develop K-12 cybersecurity programming in English and French.

All our successes, the progress we've been able to make so far and our path forward are only possible thanks to donors like you.

ADRIENNE OLDFORD
EXECUTIVE DIRECTOR

"

WE WANT TO HELP LEAD A CONVERSATION ABOUT WHAT'S POSSIBLE FOR NEW BRUNSWICK.

"

PROTECTING RIGHT WHALES WITH DIGITAL TECHNOLOGY

Endangered right whales navigating Canada's busy Gulf of St. Lawrence will benefit from an extra layer of protection this year, thanks to the generosity of the Murphy Family Foundation.

The Murphy Family Foundation's gift in support of the McKenna Institute is funding the Murphy Family Postdoctoral Fellow in Ocean Conservation at UNB's Davies Lab in Conservation Oceanography and Marine Technology. This new fellowship will enable Dr. Kimberley Davies and her team to build on a research partnership with Transport Canada to monitor shipping lanes for whale activity through the use of underwater gliders.

Dr. Leila Fouda joined UNB Saint John as the Murphy Family Postdoctoral Fellow in Ocean Conservation on April 15, 2024. Fouda is an early-career marine ecologist who comes to UNB from the Yale Centre for Biodiversity and Global Change. Her research will help fill knowledge gaps on the relationship of whales with the wider environment, including the impact of human activity on animal movement.

The Murphy Family Foundation's gift has enabled Davies to purchase two additional lithium glider batteries. This will allow Davies and Fouda to double the extent of underwater glider whale surveillance in East Coast shipping lanes over the coming year. Transport Canada has agreed to help support this doubling of the Davies Lab's glider research through increased operational funding.

"We believe that protecting our oceans is one of the most significant conservation opportunities of our lifetime," said Shannon Murphy, director of the Murphy Family Foundation. "When Frank McKenna came to us with a proposal to help advance Kim's research into ways of protecting right whales in active shipping lanes using digital technology, we wanted to see the data. We're happy to invest in her work because it is getting results."

THE MCKENNA SCHOLARS PROGRAM

In its second year, the prestigious McKenna Scholars program continues to attract the best and brightest students from across Canada and around the world.

With a focus on women, Indigenous students and students in financial need, McKenna Scholars are building a community of future leaders to accelerate talent and ideas in a digital New Brunswick. To date, the McKenna Scholars program has received $1.8 million in funding.

The McKenna Institute is proud to assist in UNB's mission to grow its computer science faculty to be inclusive, equitable and diverse. Together, and with the support of our donors, we are creating opportunities for under-represented students in computer science and engineering programs, ensuring them a place in New Brunswick's exciting digital future.

Nine awards, with a total value of $186,500, were awarded in 2023-24 to 22 exceptional students in computer science and software engineering programs on our Fredericton and Saint John campuses.

NEW MCKENNA SCHOLARS AWARDS IN 2023-24:

THE GEOFF FLOOD ATLANTIC BIG DATA CONGRESS SCHOLARSHIP

Valued at $10,000 and awarded to an outstanding graduate student in the area of data science, artificial intelligence and machine learning whose research relates to an applied project for the private or public sector, with preference to candidates working in the area of health or agriculture.
Donor: Atlantic Big Data Congress through the McKenna Institute

THE G. WALLACE F. MCCAIN, CC, ONB SCHOLARSHIP

Two awards valued at $40,000 each over four years and awarded to students beginning a computer science or software engineering undergraduate degree program. Selection is based on academic achievement; preference may be given to women, Indigenous students and students from rural communities. Consideration may be given to financial need.
Donor: The Wallace and Margaret McCain Foundation

THE PASCAL SIAKAM SCHOLARSHIP

Valued at up to $8,000 and awarded to a student from Cameroon with a preference to a student who is enrolled in a computer science or software engineering undergraduate degree program. Selection is based on academic achievement; consideration may be given to financial need.
Donor: PS43 Foundation and Pascal Siakam in honour of his father, Tchamo Siakam

A LIFE-CHANGING AWARD

A Sportsnet documentary has told the story of what may seem an unlikely partnership: between two-time NBA All-Star Pascal Siakam and the McKenna Institute.

The documentary highlights the connection between Siakam, then a power forward for the Toronto Raptors who has since moved to the Indiana Pacers, and fellow Cameroonian Cedrick Tahmo, a second-year computer science student at UNB Saint John.

Tahmo is the inaugural recipient of the Pascal Siakam Scholarship, an award established through a $100,000 donation from Siakam's PS43 Foundation with a matching gift from the River Philip Foundation. The scholarship is valued at up to $8,000 and is awarded to a student from Cameroon, with preference to a student who is enrolled in a computer science or software engineering degree program.

In December 2023, Tahmo flew to Toronto to attend a Raptors game and meet Siakam in person. The Sportsnet documentary captures the first meeting between the two, on the floor of the Scotiabank Arena.

Siakam dedicated the Pascal Siakam Scholarship to the memory of his father, Tchamo, who instilled in his son the importance of education.

"My dad was always big on education," said Siakam. "He always believed that every kid deserves an education. There's a lot of things you can do in life. They might go away, but your education is one thing that sticks. I just always felt like that would be my mission, to continue that legacy and make sure I give kids an opportunity to dream bigger."

For Tahmo's part, the scholarship has changed his life, allowing him to work fewer hours and spend more time to focus on his studies. "He has helped me out in a way I didn't imagine anyone would," Tahmo said. "Thank you, Pascal."

MCKENNA FELLOWS & RESEARCH CHAIRS

Big ideas can change the world, but they need support to go from concept to reality. The McKenna Institute fosters progress by gathering bright minds from New Brunswick and beyond to address challenges in digital transformation. Our goal is to speed up talent recruitment and the adoption of digital transformation ideas. The McKenna Fellows program is instrumental in achieving those goals.

Over the past three years, we have been pleased to launch two McKenna Fellows and two Research Chairs at UNB with the help of our community and industry partners. These strategic chairs allow the McKenna Institute to nurture a workforce and a society that are ready for the incredible opportunity before us in digital transformation.

DR. MATT MCGUIRE
McKenna Fellow in Digital Education

The McKenna Fellow in Digital Education is working with the McKenna Institute, the New Brunswick Department of Education and Early Childhood Development (EECD) and other education stakeholders to develop and implement a new K-12 digital literacy program across all New Brunswick schools. The fellowship is located in UNB Fredericton's faculty of education and was created through the generosity of an anonymous donor.

Dr. Matt McGuire, the inaugural fellow, has developed educational technology courses in UNB's bachelor of education program and is developing courses for the master in education program. These courses are enhancing future teachers' knowledge and skills in educational technologies and ultimately will strengthen all New Brunswick students' digital literacies and competencies.

Working with EECD, McGuire has developed a New Brunswick Digital Literacy Framework. He has also begun running a digital literacy program pilot at Barker's Point School, and has created AI guidelines for the faculty of education.

DR. DAVID FOORD
Wilson-McKenna Fellow in Digital Sustainability

The focus of this fellow is on the power of technology to further enhance environmental, social, and governance (ESG) reporting for organizations across the globe, and to be a catalyst for digital solutions to sustainability strategies. This fellow was created through a gift of $300,000 from Jane and Mike Wilson, business and community leaders from Sackville, N.B.

Dr. David Foord began work as the Wilson-McKenna Fellow in Digital Sustainability in fall 2023 and has developed a new course in the faculty of management's bachelor of business administration and master of business administration programs, focusing on digital ESG. Foord is working on three research projects to advance sustainability using ESG frameworks in the electric power industry and consumer/citizen behaviour change. In addition to other projects under the fellowship, he is also developing a Speaker Series with a focus on digital ESG.

DR. KENNETH (KEN) KENT
Barrett Chair in Entrepreneurship for Digital Transformation

Created through a generous $2.5-million commitment from New Brunswick business leaders and entrepreneurs Edward (Ed) and William (Bill) Barrett, the Barrett Chair in Entrepreneurship for Digital Transformation is located in UNB's faculty of computer science. The chair was established to advance the faculty's mission while furthering its shared goals with the McKenna Institute to drive a higher degree of entrepreneurial capacity for graduates from the computer science faculty.

The Barrett Chair launched the Barrett Entrepreneurship Speaker Series through the faculty of computer science. The series brought in local entrepreneurs to educate undergraduate and graduate students on entrepreneurship and its intersection with computer science and digital technology.

DR. XUN GE
Fulbright Canada Research Chair

In October, UNB's faculty of computer science and the McKenna Institute welcomed Dr. Xun Ge as UNB's first Fulbright Canada Research Chair in Digital Transformation.

Ge is an accomplished scholar in learning design and technologies and a professor and incoming chair in the department of learning technologies at the University of North Texas.

During her semester at UNB, Ge expanded her expertise in instructional design development to extended reality and artificial intelligence to generate theories and research aimed at improving learning and instruction for various educational settings.

Ge worked with Dr. Scott Bateman in computer science, and Drs. Renée Gordon and Donald Leidl in nursing to integrate virtual reality (VR) into the Learn Where You Live program in nursing. Their work will determine how best to create a VR learning environment using real-world scenarios, instructor guidance and structured activities to improve students' critical thinking and problem-solving skills. She also worked on a project with Dr. Daniel Rea, Harrison McCain Young Scholars fellow, on a project researching the social impact of robots, to examine the abilities of avatar robots to mitigate gender and racial biases in interview scenarios.

Fulbright Canada is a bi-national, treaty-based, non-governmental, not-for-profit organization with a mandate to identify the best and brightest minds from the United States and Canada, and engage them in residential academic exchange. Fulbright Canada is supported by Global Affairs Canada, the United States Department of State and a diverse group of corporate sponsors, charitable trusts and university partners.

These prestigious fellowships have enabled UNB to harness and focus the research capacity of some of our province's brightest minds, while reinforcing the Institute's long-term commitment to economic growth, social progress and digital sustainability in New Brunswick and beyond. When you support the McKenna Fellows program at UNB you make possible the digital transformation of industry and society.

If you are interested in learning more about supporting research that advances industry and community through this program, please contact the McKenna Institute at **mckenna@unb.ca**.

EMBRACING THE POTENTIAL OF ONLINE LEARNING

In the heart of New Brunswick, UNB alumnus Sahil Mehta (MBA '23) stands as a beacon for residents aspiring to advance their careers. His message to everyone is to seize the transformative power of the IBM SkillsBuild platform.

The McKenna Institute's partnership with IBM SkillsBuild crafts tailored learning pathways and pairs learners with subject matter experts in areas such as cybersecurity, artificial intelligence, data analysis, web development and more.

Sahil worked with the McKenna Institute as a digital success coordinator, and has since moved to a new position as global robotics engineer with McCain Foods. He discovered this opportunity during a chance meeting with former UNB chancellor Allison McCain at the McKenna Institute's Digital Innovation Summit. He remains a passionate advocate for the IBM SkillsBuild program.

Mehta said the platform is being used across the province by residents in cities and rural communities, by university students and faculty, and by small businesses. "Its widespread adoption speaks to the platform's impact and value to diverse segments of the population."

Sahil Mehta (MBA '23)

He wants everyone to know about the opportunities that the McKenna Institute's IBM SkillsBuild platform presents. "Embrace this platform and let it pave the way for a smooth and successful journey towards your dream career."

New undergraduate technology programs at UNB Saint John will create opportunities for students to learn skills to become leaders in the digital economy for industry.

NEW PATHWAYS TO SUCCESS

Students will soon be able to choose new digital pathways in higher education that lead to industry careers, thanks to a $1-million gift from J.D. Irving, Limited.

Focused on developing a talent pipeline to improve digital technology competitiveness for organizations in New Brunswick, the pathways program will invest in student scholarships and bursaries at both NBCC and UNB in Saint John for multiple programs related to digital technology. The fund will also be used to improve existing curriculum surrounding digital technology at both institutions; to explore opportunities for joint applied research; and to align initiatives with sectors while ensuring skills security through the creation of flexible, transferable pathways for learners.

To facilitate development of these digital pathways, the McKenna Institute has been working with the Centre of Excellence in New Brunswick's Department of Education and Early Childhood Development.

UNB's Senate recently approved the launch of an undergraduate technology program, which has been sent to the Maritime Provinces Higher Education Commission (MPHEC) for review. UNB, the McKenna Institute and NBCC have been working on joint communication and student recruitment strategies, so new academic pathways can be launched as soon as MPHEC approval is received. It is anticipated that the first students will be enrolled in fall 2024 or fall 2025. The first programs associated with the digital pathways will involve industrial engineering and environmental engineering.

Dr. Petra Hauf, provost and vice-president academic, said the program will educate a "generation of leaders" in the digital economy for industry.

"UNB and J.D. Irving, Limited share a long history of working to build a better New Brunswick. We are tremendously grateful to JDI for this investment in New Brunswick's digital future," said Hauf.

IGT SPURS RESEARCH, STUDENT EXPERIENCE

One of the world's powerhouse gaming companies, International Game Technology (IGT), is investing in support for interdisciplinary research and teaching at UNB focusing on AI, data science, gaming software and hardware platforms, game design, theory and modelling.

IGT's investment will also support scholarships for undergraduate and graduate students, upgrades to UNB's Significant Play and Research in Games Lab, and an outreach component that helps support faculty of computer science summer camps for middle school students, including students from populations that are under-represented in computer science.

IGT's gift has already begun changing the research and educational landscape at UNB. With IGT's support, students began work in May on a research project involving anonymized data on the game play of a number of users. IGT has also made it possible for the UNB e-Sports Society to enroll teams in the Frag for Cancer Tournament in Halifax. UNB's *Valorant* team made it to the grand finals, while two teams registered in *Rocket League* gained experience and had fun.

IGT recently joined UNB in welcoming the university's first innovation director of the Research Institute in Data Science and Artificial Intelligence (RIDSAI), Aaloak Jaswal (BScCS'93, D-TME'93).

Jaswal, a UNB alumnus, is a seasoned leader in digital transformation, innovation, and information and communication technology, boasting over 20 years of international experience including notable roles at IBM, UNICEF, The Joint UN Programme on HIV/AIDS (WHO/UNAIDS), the UN Technology Innovation Lab (UNTIL) and as CEO/Founder of Shakti Power Systems. Most recently, he served as head of digital transformation for the UN Economic Commission for Africa (UNECA), where he drove impactful change in complex, global environments.

Jaswal is bullish about the impact that supporters such as IGT can have through investments that boost applied research and education in AI.

"These technologies will revolutionize a multitude of industries, from health care and education to manufacturing and agriculture," Jaswal said. "They hold immense potential to drive innovation, improve student learning experiences and foster innovation and economic growth within the province. Moreover, integrating these technologies into academic and research endeavors can position UNB as a leader in cutting-edge research and education, attracting top talent and funding opportunities."

From left to right: UNB President Paul Mazerolle;
Luigi Benedicenti, dean of the faculty of computer science;
Paul Cook, associate professor in the faculty of computer science;
the Hon. Frank McKenna; Erin Barrett, CEO of Eigen Innovations;
and David MaGee, UNB vice-president (research). An event on
Aug. 22, 2023, launched the UNB Research Institute in Data
Science and Artificial Intelligence. The institute will bring together
scholars from across the university to discover, create and deliver
fundamental knowledge and innovative solutions to the people
and groups who need it most.

Aaloak Jaswal, first innovation director of the Research
Institute in Data Science and Artificial Intelligence.
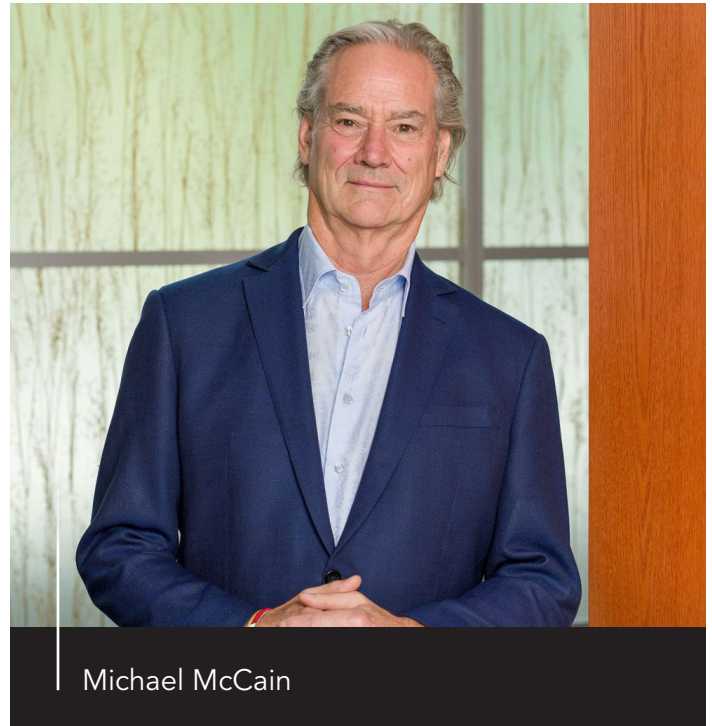
ACCELERATING AI POTENTIAL

One of the most pressing issues that existing industrial sectors and businesses must overcome is harnessing the tremendous efficiencies that can be created using artificial intelligence.

Industries in New Brunswick will have a competitive edge in this area, thanks to a foundational gift to the McKenna Institute from Michael McCain.

McCain's gift has created the McKenna Institute Industry Outreach Fund, a strategic fund that will support the adoption of AI by New Brunswick businesses and educate the workforce in the implementation of artificial intelligence.

Adrienne Oldford, executive director of the McKenna Institute, said "This fund will help bridge the knowledge gap between industry and academia, accelerating AI awareness, implementation and skills development in ways that are uniquely useful to businesses in New Brunswick and Atlantic Canada."

"This year, we are supporting two sector-based industry and researcher gatherings through Mr. McCain's generous gift," Oldford said. "In August, the UNB Off-site Construction Research Centre and Northumbria University will be hosting Transforming Construction with Off-site Methods and Technologies: Designing Tomorrow's Construction, Today — a conference where we will focus on AI adoption in that sector. In October, we will be supporting a conference led by Université de Moncton, which will focus on AI adoption in the energy and critical infrastructure sector."

Michael McCain

The McKenna Institute Industry Outreach Fund also will support an accelerated, bilingual learning program that will enable students and industry to fast-track AI skill development in partnership with Université de Moncton.

"We already have extensive resources in AI research in New Brunswick," Oldford said. "This fund will help industry and researchers apply that potential to strengthening global competitiveness and growing the economy."

LITERACY 2.0 SET TO LAUNCH

UNB's efforts to develop digital literacy programming for economically disadvantaged children accelerated this year, thanks to the Joyce Family Foundation's gift to The Promise Partnership Digital Literacy Initiative.

UNB's Integrated Health Initiative and the McKenna Institute have drafted a three-year strategy for the expansion of The Promise Partnership K-12 peer mentoring program to Moncton and Fredericton. Central to this plan is the rollout of a new digital literacy curriculum. The first stage began in January 2024 in Saint John, with the hiring of curriculum developer Kate Saaedi. A needs assessment for local partner schools will drive curriculum development for the September 2024 school year. This will be followed by expansion pilots in Moncton and Fredericton, with further expansion into rural communities in subsequent years.

To lay the groundwork for this ambitious expansion, staff convened two strategic exploration meetings — one in Moncton in December 2023, and another in Fredericton in January 2024. These meetings served as a platform for dialogue with key partners, stakeholders and influencers, including leaders from school districts and post-secondary institutions, curriculum experts, representatives from multicultural associations and members from both the McKenna Institute and The Promise Partnership. The positive feedback and collaborative spirit exhibited in these gatherings reaffirmed these communities' readiness and eagerness to embrace The Promise Partnership's expansion.

"None of this would be possible without the support of The Joyce Family Foundation, The Wesley & Patricia Armour Foundation and other philanthropic donors," said Catherine Vanderburgh Kerr, managing director of The Promise Partnership. "We can't wait to bring digital literacy mentoring to other communities alongside our core programs in literacy and numeracy."

INNOVATION THROUGH PARTNERSHIPS

To put it simply, our partnerships with industry, government and the non-profit sector are responsible for our success. It is a privilege to collaborate with organizations and groups that share our vision for New Brunswick's bright future and who want to see our province prosper and shine.

The past three years have brought multiple partnerships that will advance the digital transformation of New Brunswick by accelerating the acquisition of talent and the promotion of transformative ideas.

SHOPPERS DRUG MART

Shoppers Drug Mart has partnered with UNB through the McKenna Institute to identify, build and test new models of health care for communities in need using pharmacies and new digital tools to make health care more accessible and convenient.

In fall 2023, Shoppers Drug Mart was a lead sponsor for MedTech, a collaborative health innovation ecosystem-building event with Université de Moncton, Venn Innovation, and ResearchNB. Over 150 participants from the health ecosystem in New Brunswick and beyond attended. Shoppers Drug Mart is making strategic investments in a few key researchers they met during the event to support innovative health research in New Brunswick.

Shoppers Drug Mart has also made investments in health innovation labs in partnership with the Pond-Deshpande Centre at UNB. These investments will be focused on system solutions for diabetes and cardiovascular health care in New Brunswick and will include partnerships with stakeholders such as Heart and Stroke NB. This work follows an initial investment in the New Brunswick Institute for Research, Data and Training (NB-IRDT) and a provincial study on cardio and diabetes health by population and sociodemographic information.

JEDI AND THE ULNOOWEG EDUCATION CENTRE

Through the support of philanthropic gifts worth $5.2 million from the Mastercard Foundation and $750,000 from TD Ready Challenge, UNB has brought together the Joint Economic Development Initiative (JEDI) and the Ulnooweg Education Centre in supporting the Digital Acceleration for Indigenous Youth partnership.

Students will learn via a mobile technology unit that will bring educators and the necessary tools directly to Indigenous communities, focusing on uplifting cultural practices and values as part of the program. Opportunities in areas such as fabrication, cybersecurity, artificial intelligence and robotics, among others, will be shown as career opportunities to those with specific skills training.

The project is entering its final design phase. OSO Planning + Design, a community-based planning and design firm located in Halifax, is working with Indigenous communities on the design plan of the mobile makerspace unit.

IBM SKILLSBUILD

UNB is working with IBM Canada to provide education and career readiness resources to students, businesses and community members across the province. To that end, the McKenna Institute is providing enhanced access to IBM Skillsbuild with its partners at UNB, Université de Moncton and TechImpact, with funding provided by the Government of New Brunswick's Department of Post-Secondary Education, Training and Labour. IBM SkillsBuild is a free digital training program that prepares users for in-demand, entry-level IT and non-IT roles in many industries. It enables UNB to develop custom pathways for companies that wish to upskill their employees.

With more than 1,200 users registered through the McKenna Institute, we are expanding the reach of IBM SkillsBuild in the province, addressing one of the key challenges to tech development: breaking down the barriers that have historically prevented underrepresented groups from participating in and benefiting from technology.

THALES

The McKenna Institute has partnered with Thales, a global cybersecurity and defence company with a head office in France, to develop their Canadian National Digital Excellence Centre at UNB. The partnership has been funded by ACOA with $1.8 million in support for the development of the Centre.

The McKenna Institute and Thales have developed a project plan for the delivery of a K-12 Cybersecurity program in both official languages to be offered throughout New Brunswick to engage students in cyber education and science, technology, engineering and math (STEM) careers generally.

Thales has established office space in Fredericton's Knowledge Park, have hired a New Brunswick-based executive director of the National Digital Excellence Centre, Shane Murphy, and are ramping up their capabilities. The Thales' Cyber Security Operations Centre for North America will eventually employ more than 100 highly skilled workers in Fredericton.

PARTNERSHIP IN EDI

Historically disadvantaged and disenfranchised groups, including women, Black Canadians and Indigenous persons, are still not well represented in the technological professions reshaping our world. The McKenna Institute is helping UNB establish partnerships that are generating new equity, diversity and inclusion (EDI) initiatives designed to broaden our outreach into the community.

Through donor support of the McKenna Institute and an in-kind gift from MESH Diversity CEO and UNB alumnus Mike Wright (BBA'96, BCS'99), UNB's computer science faculty is the first in Canada to offer the MESH platform and Inclusive Leadership program to faculty, staff and students. A series of seven facilitated and engaging diversity and inclusion training sessions began over the 2023-24 academic year with three sessions – in a combination of live and virtual format – to a pilot group of up to 50 students and members of the faculty. The remaining four sessions, to complete the Inclusive Leadership Program, will be held over the coming 2024-25 academic year with the same cohort.

ICTC WOMEN IN CYBERSECURITY

The McKenna Institute, UNB's faculty of computer science and the New Brunswick Community College School of Information Technology have collaborated on the New Brunswick pilot of the federal Information and Communications Technology Council (ICTC) Cybersecurity Training and Work Integrated Learning Program. This program offers the opportunity for female and non-binary students to become Microsoft Certified in Cloud Security, Network Security and a unique certification on artificial intelligence in cybersecurity.

The program runs for eight months and includes up to a 16-week work placement, so students are prepared for work placement upon graduation. The first cohort to participate in the program is soon transitioning into their summer placements with companies such as NB Power, Bulletproof and Verosource, with another cohort beginning in the fall of 2024-25.

PARTNERSHIPS IN EDUCATION

The McKenna Institute is proud to work with the New Brunswick Department of Education and Early Childhood Development on the Institute's Digital Transformation Roadmap that includes eight phases and was first announced in June 2022.

The first phase includes shaping how teachers approach digital education with the Digital Learning Network, annual Tech 4 Teachers Conferences, and by collaborating with New Brunswick's Centre of Excellence for Digital Innovation. Sixty guests attended the 2023 Teach 4 Teachers conference in Miramichi.

Additionally, we are partners in education on the launch of the New Brunswick Centre of Excellence in Digital Innovation, the development of digital literacy framework and standards implementation in our schools, parent-community events with workshops for families and community, training plans for teachers who specialize in technology, and experiential learning in technology.

We are investing in leaders like Dr. Matt McGuire, who holds a PhD in education, by developing a framework for digital literacy in education, which outlines the six core competencies required to thrive in a digital economy.

The McKenna Institute's work in education is essential to our robust rural strategy. This strategy is designed to bridge the digital divide, providing support and resources for schools, students and adults in rural areas through scholarships, workshops and skills training. Digital Innovation Community Events were held in four rural areas of the province, giving students and community members exposure to digital career pathways.

WHAT'S NEXT

What will the next 25-plus years look like? We spent the Institute's first year raising $55 million to fund impactful projects. In the second year, we launched many programs, some of which are highlighted in this report.

Now, we want to help lead a conversation about what's possible for New Brunswick. Why is being digital important? What could being digital look like for all New Brunswickers? What have we learned about successful digital economies? What do we have in place today, what is under development and what are our gaps?

AI is one area that represents a huge opportunity for growth in the economy and society; it can have the kind of transformational impact we've been working toward for more than 25 years. But we'll only learn its potential if we really collaborate as an ecosystem across academia, government and industry. The opportunity is certainly there for us to take our place on the national stage — and we are well on our way.

OUR GRATITUDE

Thank you for your generous support of the McKenna Institute.

Together, we are working to design a technology-enabled tomorrow that improves life for every New Brunswicker.

Your support is vital to our success.

OUR DONORS & PARTNERS

Frank & Julie McKenna | Government of NB
Mastercard Foundation

ACOA | Mathieu Arsenault | Natalie Arsenault
Bill & Ed Barrett | Richard Carpenter
International Game Technology (IGT) | J.D. Irving, Limited
Joyce Family Foundation | Margaret Norrie McCain
Shoppers Drug Mart | River Philip Foundation

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ADRIENNE OLDFORD
Executive Director
McKenna Institute
T: (506) 962-2575
E: adrienne.oldford@unb.ca

JEFF WRIGHT
Executive Director
Development and Donor Relations
T: (506) 447-8110
E: jeff.wright@unb.ca

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