ICTC CTIC

Information and Communications Technology Council

ANNUAL REPORT
2018/2019

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MESSAGE FROM CHAIR

As the incoming Chair of ICTC, I am delighted to be assuming this role at a time of ICTC's remarkable journey of growth, strength, and measurable successes that now celebrates over 26 years of achievements in an era of extraordinary technological advancements.

Digital transformation continues to profoundly change the face of business in Canada while unlocking greater value for the economy and society. Digital technologies now permeate every aspect of our lives, and enterprises across Canada are repositioning their business models and talent strategies to be digital first. The advent of transformative technologies like Artificial Intelligence (A.I), IoT, Blockchain, and many others are also empowering many companies to become business leaders, transforming them from disrupted to disruptors in an ever-increasingly competitive marketplace.

This accelerated wave of business transformation, however, comes against a backdrop of soft commodity prices, looming interest rate hikes, global geopolitical inflections, and increasing labour shortages. Despite these challenges, the digital economy in Canada showed remarkable resilience in 2018. According to ICTC's research, the digital economy employed around 1.45 million Canadians and boasted a job growth that outpaced the rest of the economy by 4 to 1. Such healthy trends are expected to continue in 2019 based on early indications.

In fiscal 2018-2019, ICTC continued to inspire a forward-looking digital agenda for Canada by delivering pioneering research, evidence-based policy advice, and creative capacity building programs. We participated in a variety of wide-ranging forums and speaking engagements at over 26 leading national and international events. The year also marked rapid organizational growth for ICTC that expanded our presence in Ontario, British Columbia, Alberta, Saskatchewan, New Brunswick, and Nova Scotia as well as internationally.

Our focus for the next number of years continues to be on "Strengthening Canada's Digital Advantage" by deciphering and translating important digital trends and assisting our partners and stakeholders in navigating key national and global opportunities.

Finally, I wish to conclude by thanking all Board members for their engagement and commitment, our partners and stakeholders, and the ICTC employees whose professionalism and dedication have been a key contributor to our success. We look forward to a productive 2019 - 2020

Dr. Thomas P. Keenan FCIPS, I.S.P., ITCP

ICTC Board Chair

MESSAGE FROM THE PRESIDENT

Our world is gradually becoming urbanized. Today, it is estimated that over 4 billion of the world population live in cities generating over 70% of the global GDP.

Tomorrow's cities are increasingly seen as the epicentre of socio-economic activities with the potential of enabling sustainable growth, better quality of life, improved management of the environment, as well as creating meaningful employment for an increasingly diverse and multigenerational society. The promise of tomorrow's smart and connected cities has also the allure of improved business connectivity, enhanced economies of scale, superior mobility, and logistical efficiencies making them inherently appealing to multinational companies (MNCs), a key factor for stimulating local businesses and opening doors to international markets.

Last year, Canada's economy continued to undergo structural transformation brought upon by innovative technologies, evolving trade dynamics, environmental trends, and labour market shifts that are markedly changing the nature of work. The so called "Exponential Technologies" like A.I, IoT, Blockchain, 3D Printing , and Robotics have rapidly become a universal ingredient across many industries. However, despite the enormous potential of these technologies, there are lingering trepidations about the impact of such an increasingly automated and industrialized setting on labour markets. While such concerns are legitimate, our research points to a foresight of several jobs created for every one displaced by automation and robotics. The key ingredient for success however remains one of continually retooling the workforce to respond to a rapidly changing economy.

Last year our remarkable journey continued its strong ascent, enhancing the range economic and labour market intelligence, policy advice, and capacity building programs for Canadians and enterprises.

On the research and policy front, we significantly intensified our reach by tackling important themes relevant to the growing digital economy, including the release of key publications that included: The Autonomous Vehicles & The Future of Work; 5G Mobile: Jumpstarting our Digital Future; Shifting Foreign Direct Investment to High-Growth Sectors in Canada; Paving The Way for the Future of Work; Mapping Calgary's Digital Future – Tech Employment Opportunities for Displaced Workers; EnABling Change: Removing Barriers and Supporting Meaningful Employment of Ontarians with Disabilities in ICT. We also provide strategic guidance on a Data Economy Strategy; the Government of Canada's Digital Policy; as well as providing input to the Federal Government 2019 Pre-Budget Consultations where we underscored the importance of stimulating digital adoption coupled with short duration training to help Canada's Micro and SMEs compete in a global context.

Namir Anani, P.Eng
ICTC President and CEO

ABOUT
ICTC

The Information and Communications Technology Council (ICTC) is the trusted source for evidence-based policy advice, forward looking research, and creative capacity building programs for the digital economy. As an independent and neutral policy advisor, ICTC offers specialized knowledge and an informed perspective on digital policy in support of government and business decision makers. Through our primary quantitative and qualitative research, we measure the digital socio-economic environment, formulate and recommend policy solutions for our country to take full advantage of ongoing global digital transformation. ICTC is a leader in developing workforce solutions and delivering talent programs to enable Canadian businesses to access the right talent with the right skills needed to drive innovation and productivity in an increasingly competitive environment. ICTC believes in the importance of developing a highly skilled, educated and motivated ICT/digital workforce that will drive Canada's economic growth and innovation. In partnership with Canadian industry, government, not-for-profits and the education sector, ICTC strives to define critical competencies and standards; build education and employment pathways for youth and adult learners to increase digital literacy/skills; provide educators with tools and resources to enhance learning, and connect youth to jobs.

Online Tools

With a focus on desired skills and digital literacy, our unique and powerful online tools are designed to be accessible by businesses, educators, students, youths, newcomers, or any Canadian who wants to advance their own digital career.

Partnership

Our initiatives are extremely fortunate to have dedicated experts, from a variety of backgrounds, guiding their success. These individuals lend their valuable time and expertise to assist us in fostering innovative and globally competitive Canadian industries, empowered by a talented and diverse digital workforce.

Policy Advice
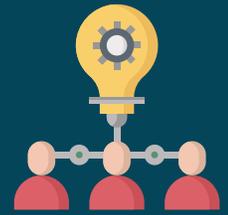
Policy frameworks focus on addressing historical inequalities in access to basic services, while ensuring that all Canadians benefit from new services. At the same time, policy solutions are tailored to help Canadians access new technologies and that ensure ICTs are actively used to meet the development goals of the country.

Research

Through our primary quantitative and qualitative research, we measure the digital socio-economic environment, formulate and recommend policy solutions for our country to take full advantage of ongoing global digital transformation.

ICTC CTIC
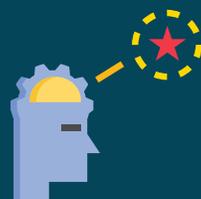
Capacity Building

Capacity building programs provide education and employment pathways to support Canada's growing ICT and digital workforce. Our programs offer multiple entry-points for students and job seekers to build skills in partnership with industry professionals.

iADVANCE

Canada's economy continues to undergo structural transformation brought upon by innovative technologies, shifting trade dynamics, and emerging environmental trends, among other factors. Together, these and other factors are altering the needs of our labour market and dramatically changing the nature of work. Canadians from all walks of 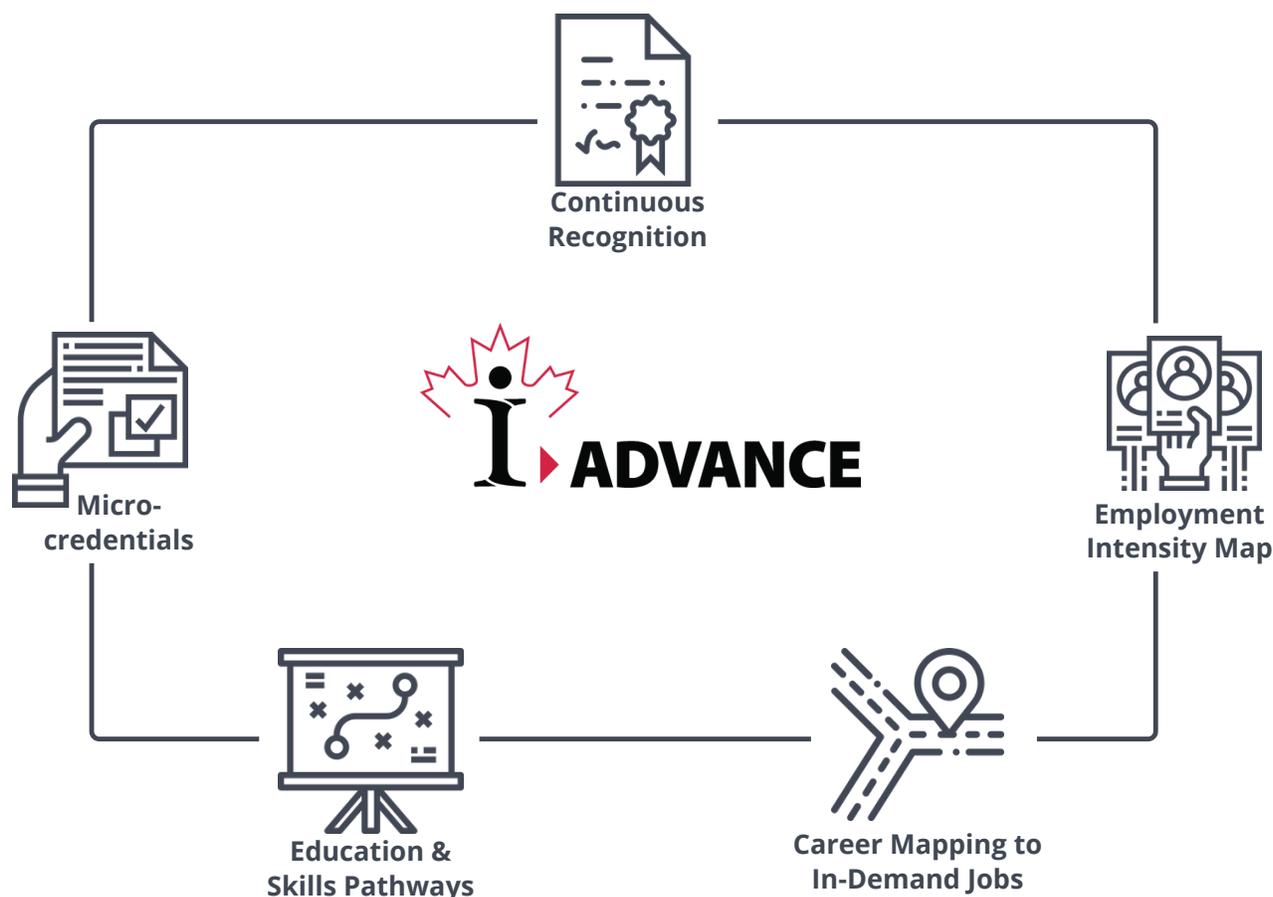life will increasingly require insights and tools to understand how to effectively navigate these changes. Knowledge of high growth sectors across the economy, as well as in-demand jobs within those sectors, is critical. However, it is only one piece of the puzzle. In an environment where the demand for skills is constantly shifting and reshaping, Canadians will also need to understand how their skills compare to those required for in-demand occupations; which short-duration training opportunities are available to offer upskilling or retraining; and what set of credentials or experience they will need to be recognized as job ready for tomorrow's economy.

By the fall of 2019, ICTC will be launching an innovative approach to offer solutions for Canadian workers and job seekers in a changing economy. Trademarked as "iAdvance", ICTC will provide Canadians with:
- Dynamic labour market intensity map.
- Skills cross-mapping.
- Options for short-duration training.

ICTC IMPACT MAP

139

35

48

1,032

1,345

1,094

2,874

7,973

1,084

1,161

2,524

5,387

2,623
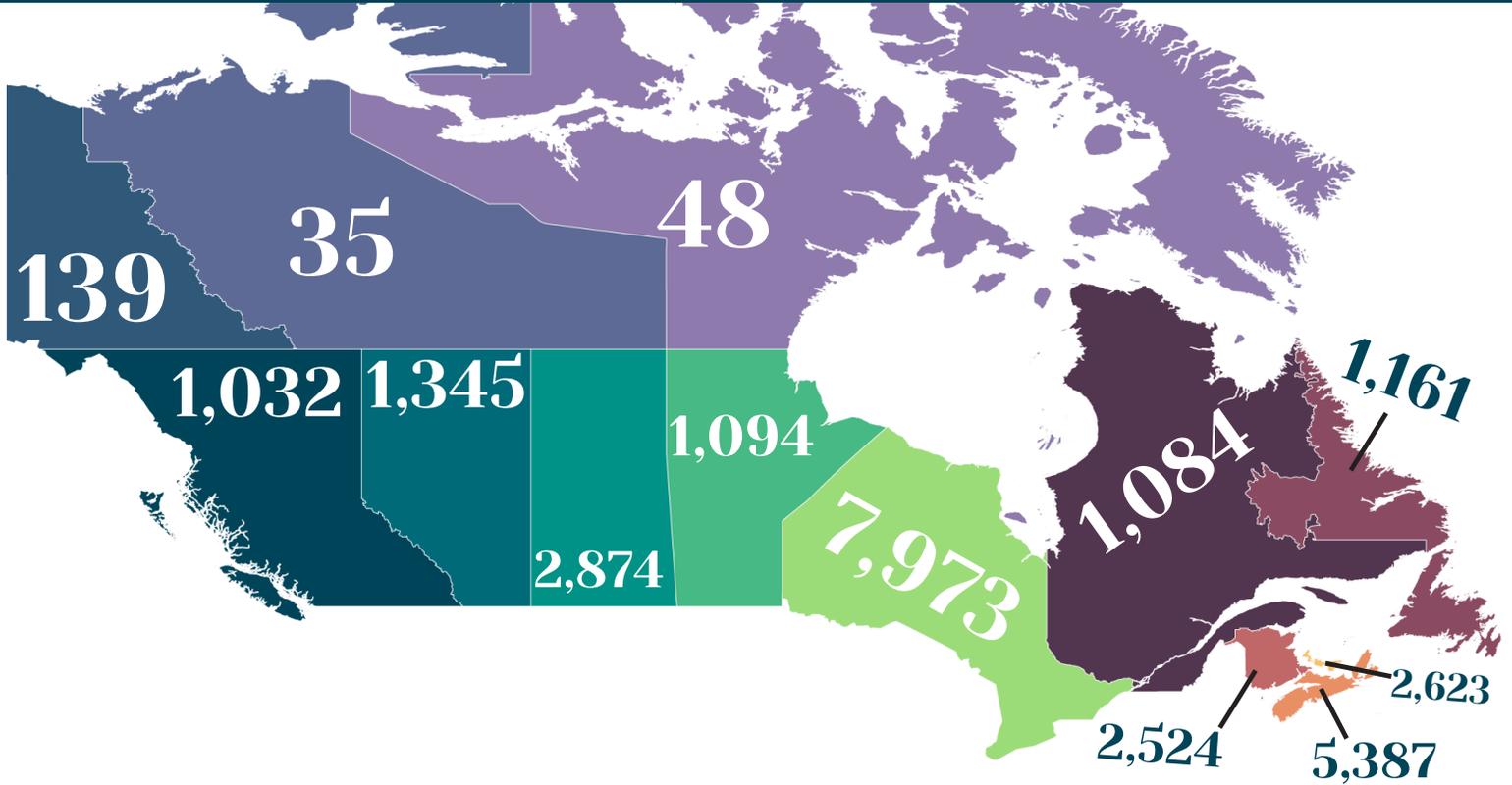
PARTICIPATION IN EDUCATION, SKILLS & EMPLOYMENT PROGRAMS:

27,319
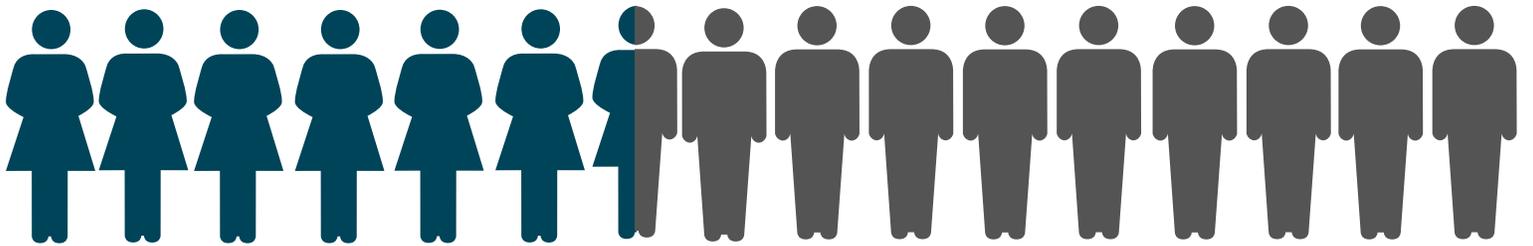
45%
FEMALE PARTICIPANTS
IN PROGRAMS

55%
MALE PARTICIPANTS
IN PROGRAMS

Impact by Age Group:

Age Group	Value
K-12	18,220
Post Secondary	384
Workforce	2,388

(Chart x-axis: 0, 5,000, 10,000, 15,000, 20,000)
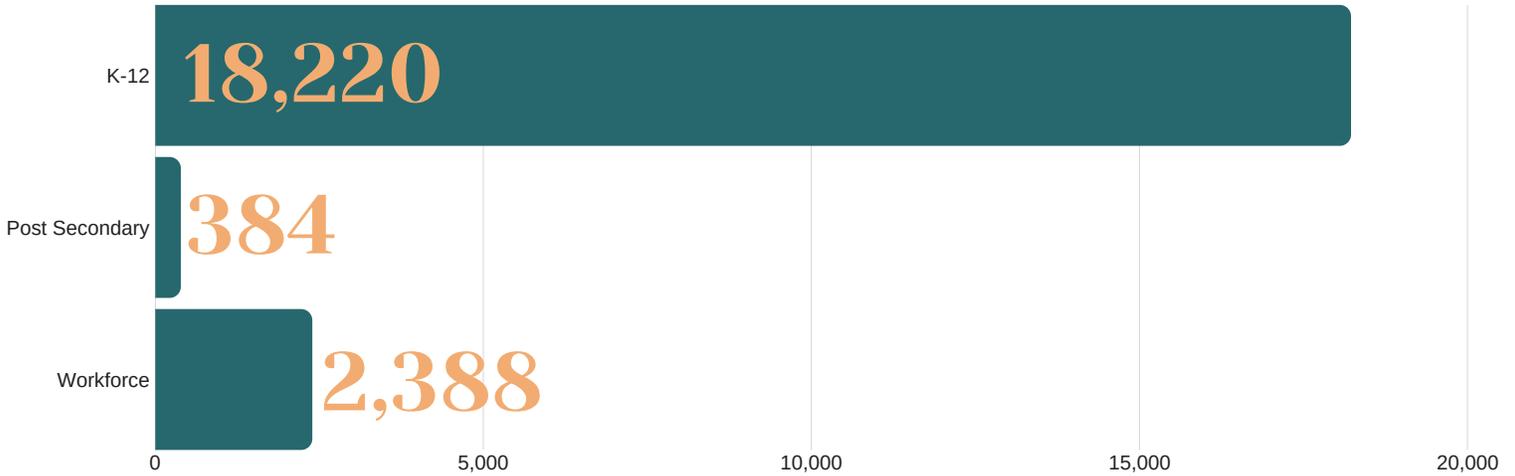
INDUSTRY ENGAGEMENT

1,150

Entertainment & Gaming

Intelligent Retail

eHealth

Artificial Intelligence
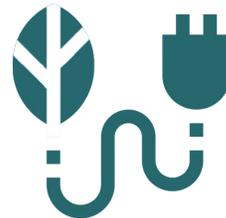
Clean Tech

Connected Transportation

Cybersecurity

Big Data

Advanced Manufacturing

FinTech

RESEARCH AND POLICY

2018/19 ICTC Research and Policy Activities

ICTC is Canada's leading centre of expertise for the digital economy. In 2018, ICTC's Research and Policy activities focused on delivering top-notch Labour Market Intelligence and broadening expertise across transformative technologies. In addition, relevant digital policy considerations were crafted, regional and municipal relationships were built and expanded on, and established advanced analytics capabilities were strengthened.

Broadening Discourse and Discussion on Canada's Digital Future

ICTC led discussions on a number of critical areas related to Canada's digital future, policy considerations, and economic needs. Members of ICTC's research and policy team contributed to these discussions via authoring reports, blogs, and whitepapers. Notable whitepapers during the 2018/19 year included ICTC's introduction to 5G and its potential impact for Canada, entitled 5G: The Last Beachfront Property. A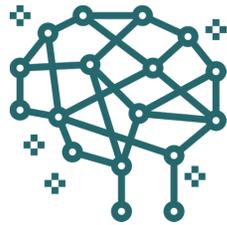nother keystone whitepaper completed during this period focused on Canada's role and responsibilities in the future data economy. Entitled ICTC's Perspectives on the Data Economy, the paper offered a comprehensive set of recommendations for Canada's pathway forward in an economic landscape where data – and the use of it – is increasingly a grounding pillar. ICTC also provided consultation and advice on the 2019 Federal Budget.

Best in Class Labour Market Intelligence and Economic Research

ICTC continues to deliver forward-looking research on various economic and labour market trends, transformative technologies, and future labour and skills needs in Canada's growing digital economy. Notable reports include:

- 5G: The Last Beachfront Property. This paper provides a high-level understanding of 5G technology, its capabilities and potential, along with critical considerations for Canada in the rollout of this new network of connectivity.

- ICTC's Perspectives on the Data Economy. This whitepaper offers a comprehensive understanding of the role of data in the future Canadian digital economy, while providing practical policy recommendations for Canada to best benefit from and lead in this new reality.

- EnAbling Change: Removing Barriers and Supporting Meaningful Employment of Ontarians with Disabilities in ICT. The first of its kind, this report uses primary research gathered via inter-views with Ontario ICT employers for the purpose of highlighting barriers faced when it comes to employing people with disabilities. The report showcases a variety of challenges faced, as well as perceived needs in order to create more inclusive and accessible policies, practices and ultimately workplaces, in Ontario's ICT sector.

- 5G: Jumpstarting our Digital Future. This report provides an in-depth understanding of 5G technology, its potential uses across sectors, and the economic and labour market implications of its rollout. Showcasing a variety of in-demand jobs and their critical skill needs, this report finds that accelerating spectrum auctions to 2019 can function to create an economic impact of $23 billion and the creation of 73,000 jobs by 2023.

- Mapping Calgary's Digital Future: Tech Employment Opportunities for Displaced Workers. Another first-of-its kind initiative, this report focuses on paving practical pathways for economic growth and employment in Calgary as the city undergoes economic diversification and growth in the technology sector. The study highlights not only the most in-demand tech jobs in the city and their critical skills, but also showcases the skills and competencies of the city's highly-skilled work-ers seeing the highest rates of displacement. With the oil and gas downturn leading to a substan-tial job loss among highly-skilled occupations like geoscientists, petroleum engineers and others, Calgary is in a position to repurpose these workers for in-demand jobs in the technology sector. With the average geoscientist being a 55% match for a data scientist, and the average electrical engineer being a 70% match for a QA tester, this report finds that short-duration training programs can be effective in reskilling these workers for in-demand jobs in the technology sector. This report was followed by an interactive web platform and tool, Calgary Upskill, providing these key in-sights to job seekers, educators, employers and policymakers.

ICTC heightened its outreach nationally and internationally, growing its brand as the "go-to" centre for research and policy on the digital economy. ICTC escalated its outreach, as well as considerably increased the production of opinion editorials, blogs, and commenting in the media.

NATIONAL AND INTERNATIONAL OUTREACH

ICTC staff spoke at events, participated as panelists, provided keynote speeches, and contributed to discussions throughout the year. Combined, these activities helped to strengthen the organization's role as a key research and policy leader in Canada.

ICTC's Research and Policy activities are conducted in a global context, taking into account developments and insights from international stakeholders and governments. ICTC's research and policy team hosted a number of national, provincial and municipal advisory committees on topics related to employment and job displacement, upskilling and reskilling, transformative technologies, and others. A number of the ICTC research and policy team also attended and presented at various conferences and events across Canada, in the US, Europe, and South America. Notable events included, among others; speaking at and attending the Open Government Partnership Summit in Tbilisi Georgia; the 13th International Conference on Telecom Regulation in Cartagena, Colombia, the FWD50 conference in Ottawa, Ontario; the Paris Peace Forum; and the Consumer Electronics Show in Las Vegas, Nevada.

CAPACITY BUILDING

CYBERTITAN

MIDDLE & SECONDARY SCHOOL

Inspires middle and secondary school students toward careers in cybersecurity or other science, technology, engineering, and mathematics (STEM) through an annual cybersecurity competition.

MYFIT

MIDDLE SCHOOL

Designed to expand the understanding that middle school students have about technology and help them build the skills they will need for the future. The MyFIT aptitudes and technological skills are applied to a real-world business scenario.

DIGITAL SKILLS PASSPORT

The Digital Skills Passport creates pathways to post-secondary education and careers by providing middle and secondary school students with the ability to track the digital skills they've acquired as they journey through education and work-integrated learning.

DIGITAL LINK ONTARIO

POST-GRADUATE

Provides incentive to employers to encourage work placements for recent ICT/digital grads in Ontario and investing in recent graduates' employability.

GO TALENT

PRE-ARRIVAL

Connects Canadian employers and Internationally Educated Professionals (IEPs) pre-arrival to fill high demand ICT roles across Canada.

BUSINESS SKILLS CHALLENGES

MIDDLE & SECONDARY SCHOOL

Opportunities for students from grades 6 to 12 to use digital skills in solving meaningful, real-world digital challenges, as identified by industry, and build the digital and business skills they will need to succeed.

FOCUS ON INFORMATION TECHNOLOGY (FIT)

SECONDARY SCHOOL

This nationally recognized certificate program was developed by top ICT educators and employers. FIT provides secondary school students with valuable course pathways and a learning environment that fosters ICT skills development.

COACH CONNECT

NEWCOMERS

A national employment readiness initiative for Internationally Educated Professionals to successfully enter into Canada's ICT sector. Delivered through a three-week online training program, providing self-directed skills development, coaching and career support to build seamless pathways to employment for skilled newcomers to Canada.

DIGITAL LITERACY AND SKILLS ROADMAP

DIGITAL LITERACY

A national guide for building Canadian digital literacy and skills in education, industry, government, and at home.

CAREER CONNECT

POST-GRADUATE

Provides subsidies to employers interested in hiring recent ICT graduates.

WORK-INTEGRATED LEARNING DIGITAL (WIL DIGITAL)

POST-SECONDARY

Placements helping post-secondary students gain practical, hands-on work experience in the ICT/Digital economy. Employers offering quality work-integrated learning placements are eligible to receive wage subsidies.

ACCESSIBLE EMPLOYMENT PRACTICES

DIVERSITY INITIATIVE

March of Dimes Canada, with the support of Government of Ontario, has developed free training resources to increase the capacity of employers in the Information Communication and Technology (ICT) sector to attract, employ and retain people with disabilities.

WIT CONNECT

DIVERSITY INITATIVE

A national program to expand ICTC's gender-based measures and build a more inclusive measurable framework of solutions to reduce barriers to entry, advancement and equality; and to increase gender parity and the attraction, retention and advancement of women in ICT occupations in the digital-based economy.

INNOVATION UNPLUGGED SUMMIT

ICTC's Innovation Unplugged – Bridging the Digital Skills Divide, in March 2019, brought together a network of leaders from education, skills development and training, provincial and federal governments and industry. The full-day event included keynote speaker Cheryl Cran and three panels discussing: The Future of Work, Inclusive Innovation and Next Generation Learning.   Participants had opportunities to listen to the panelists, ask questions and then work together to capture reactions and suggest next steps.
Some of the key themes identified at the summit:

- There are several mega-trends that are expected in the coming years to reshape the nature of work, skills & education, and inclusive innovation that include the gig economy, globalization, automation & robotics, and demographics among many others.

- The need to address the overall skills and literacy dimension of Canadian society is ever more critical for ensuring active participation and contribution of Canadians as consumers, citizens, and practi-tioners in tomorrow's economy (https://roadmap.digitalyouth.ca/). K-12 schools play a pivotal role in preparing Canadian youth for a fast pace digital skills-based economy.

- A concerted approach for engaging all partners (industry, education, and policy makers) to map-out in-demand skills; create transitional cross-paths for displaced and at-risk workers, and implement short-duration training to respond to a fast-changing digital based economy is essential in the coming years.

- Creating paths for all Canadians, starting early in schooling, to participate in an increasingly digital based economy will ensure Canada's success on the world stage.

A full report of Innovation Unplugged – Bridging the Digital Skills Divide is available on our website.

EDUCATION AND SKILLS INITIATIVES

CareerConnect

Last year, ICTC's Ontario CareerConnect Program assisted inexperienced youth in gaining employment opportunities and enabled them to achieve advanced skills acquisition through subsidized career-related work experience. The ability of companies to fund the support and development of new, young employees signiþcantly increased through the support of this program. ICTC managed to surpass the set objectives by successfully placing 89 young people within 74 different companies, and more importantly, 96% of these young professionals secured meaning-ful employment at the end of the placement with an average salary of $48,000.

CyberTitan

CyberTitan is a Canadian Cyber Security Educa-tion competition for middle and secondary school students. This school year, 189 CyberTitan teams across Canada competed over three rounds of competition among 5000+ teams globally through our affiliate partner, the US Air Force Association's CyberPatriot program. 10 teams earned a spot to the CyberTitan II National Finals in Ottawa on May 14, 2019. CyberTitan engages students in problem-solving opportuni-ties where they are given real Canadian security challenges to solve, from privacy breaches to compromised data systems.

Special thanks to our sponsors and partners: The Communications Security Establishment; IBM; ICT Association of Manitoba; Clearcable connects; KPMG; ExcelITR; Loudmouth Security, and to our program ambassadors: Opportunities New Brunswick, CyberNB, and the New Brunswick Department of Education and Early Childhood Development. We also appreciate the contribu-tion from the Ottawa Police Association and the Department of National Defence/Canadian Armed Forces, and our competition development team - Octopitech and Hacker Highschool.

Digital DASH

ICTC's Digital DASH initiative was very fortunate this past year to be part of the Government of Canada's CanCode program. The initiative provided over 18,000 of Canada's youth with learning opportunities to develop digital skills and provided over 2,000 educators with information, tools and resources that better equipped them to integrate digital skills into their classrooms and gave them a better understanding of the role they and their students play in Canada's digital based economy.

The Digital DASH Initiative partnered with educators and industry to identify real-world, in-demand and emerging skills, and map them to existing provincial curricula. Digital DASH also saw the implementation of business skills challenges. Through ICTC's partnership with Riipen, students are able to analyze "real world" business problems submitted by industry and offer solutions. This platform not only provides "real world" learning for students but it also creates opportunities for students living in remote and rural areas to work with industry they may not have otherwise had access to. Digital DASH programming was delivered in all 10 provinces, 3 territories and included Francophone and Indigenous communities across Canada. To learn about all the programs established through Digital DASH please visit www.digitalyouth.ca

Digital Link Ontario

ICTC's Digital Link Ontario is aimed at building information and communications technology (ICT) talent for the emerging technology sectors of Ontario by improving education-to-employment transitions and investing in recent graduates' employability. Through this program, companies experiencing growth have the opportunity to find talent, while post-secondary graduates gain "on-the-job" skills. The program offers support for employers through tools and resources, as well as a financial incentive of up to $3000 per placement.
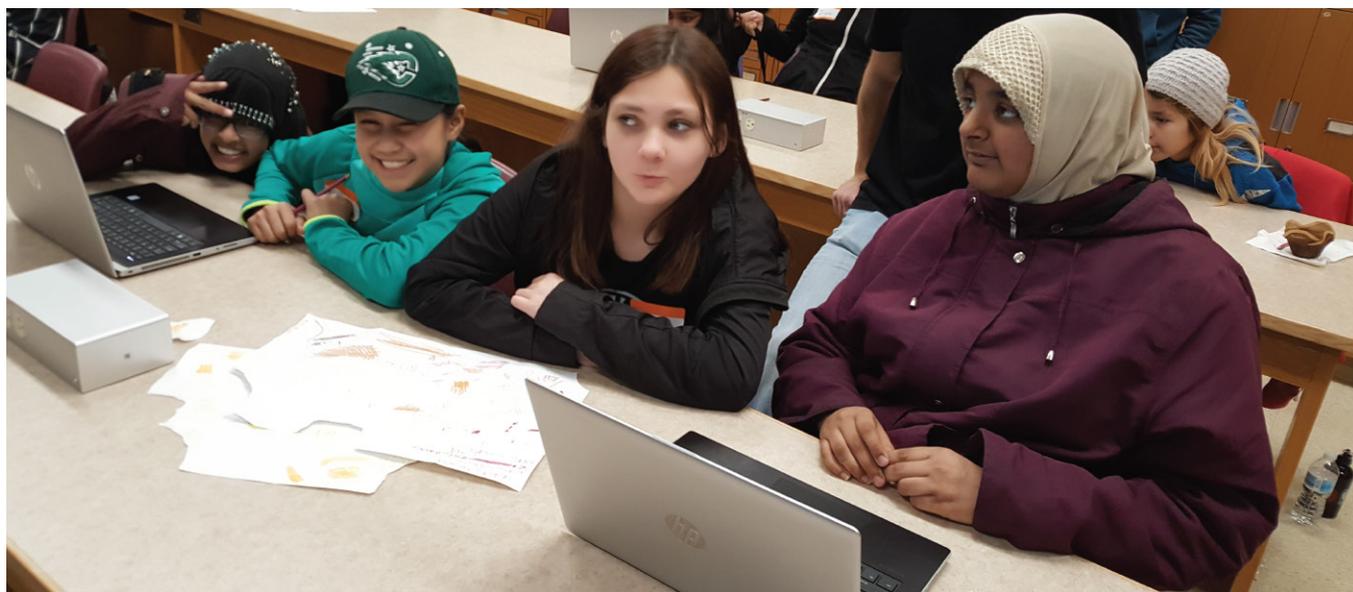
Digital Literacy and Skills Roadmap

Last fall, we launched the Digital Literacy and Skills Roadmap - roadmap.digitalyouth.ca - with thanks to our Canadian Leadership Taskforce on Education and Skills. The Roadmap is a national guide for building Canadian digital literacy and skills in education, industry, government, and at home. The Roadmap includes a compilation and elements of various digital literacy models, including the extensive work done by MediaSmarts, ESDC, ISTE, ISED, our taskforce and other digital literacy experts.

Focus on IT Program

Focus on IT (FIT) is a nationally recognized certificate program designed for Canadian students interested in gaining real-world and critical ICT, digital and business skills during their secondary school education. Developed alongside top educational and industry professionals, FIT aligns professional skills with provincial curricula and provides a clear pathway of courses for students to follow. Upon graduation students will have gained relevant knowledge and skills that are demanded by industry. Over 622 students were FIT certified in the 2018-2019 year and since 2008 over 6150 students have been certified. Under Digital DASH, the FIT framework was recently updated. There are currently now 5 streams that schools offer: Interactive Media, Software Design and Devel-opment, Business and Information Analysis, Network Systems and Operations and Cyberse-curity. Moreover, FIT will be rolled out to grades 6-9 under the Middle Years Focus on IT (MYFIT) expansion program.

ICT4ALL

ICT4ALL is an online database of tools and resources for educators to help them incorporate STEM & digital skills learning into their classrooms. This one-stop shop saves educators the time and trouble of trawling through numerous individual pages to find what they need. We are encouraging educators and industry who already have set programs to log into ICT4ALL and contribute their learning
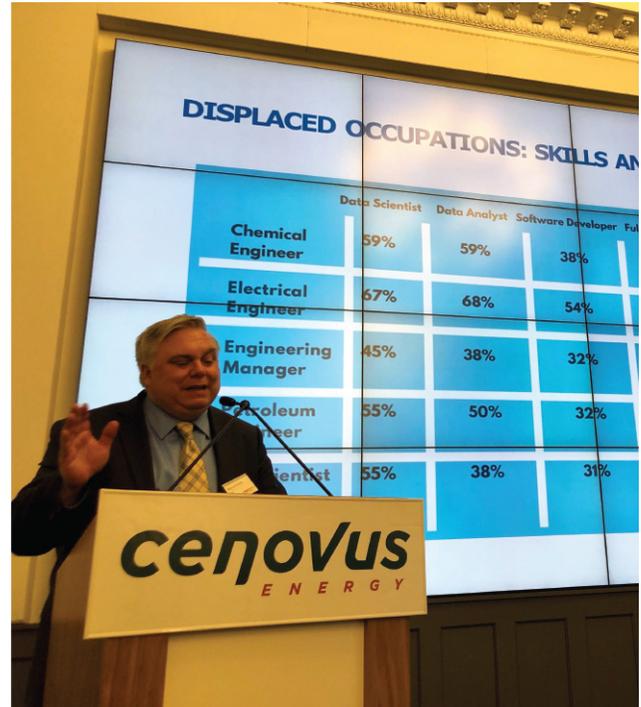
Work-Integrated Learning Digital (WIL Digital)

WIL Digital is a national initiative to develop talent for emerging & high-growth digital sectors as well as traditional sectors that are increasingly adopting technology to increase digital adaption in Canada and support the growth and innovation in businesses. WIL Digital provides opportunities for post-secondary students to work, learn on the job, and develop the skills necessary to successfully integrate in the changing labour market of the digital economy. WIL Digital is funded by the Government of Canada.

In 2018/19, ICTC worked with employers in fintech, cybersecurity, artificial intelligence, and other sectors to build new models for industry and education and to create 382 quality work integrated learning opportunities for students and employers. With a strong focus on emerging technologies, and close alignment with the skills required by employers, the program is proud to develop future-ready talent.

DIVERSITY AND INCLUSION

Coach Connect

ICTC commenced the delivery of Coach Connect – a national employment-readiness pilot initiative offering internationally educated ICT professionals (with a focus on women) with self-directed skills development training, coaching interventions and career support. Funded by Employment and Social Development Canada (ESDC), the training is designed to help participants build a seamless path to employment and improve labour market integration outcomes for ICT/digital newcomers. Over 20 community service providers and newcomer associations across Canada have been engaged with Coach Connect for outreach to recruit participants, coaches and employers. 65 newcomer participants (40% women) across Canada have participated to date with our participating employers also benefitting by being able to hire this skilled, often hidden, talent pool.

GO Talent

ICTC is proud to continue delivering GO Talent – a national pre-arrival initiative for newcomers with experience in the ICT sector. Funded in part by Immigration, Refugees and Citizenship Canada, the initiative is focused on assisting internationally educated professionals understand and prepare for the Canadian ICT labour market. GO Talent supported 1,500 newcomers from April to December last year, helping new talent navigate the Canadian job market and take advantage of some of the critical skills shortages in Canada's digital-based economy. With more than 125 companies from across Canada engaged with the GO Talent initiative and posting open positions on the e-Talent job board, or using the platform as an exclusive candidate pool, they have demonstrated that the demand for internationally educated ICT professionals among Canadian companies, both big and small, continues to grow.

Where we are going: ICTC is always reviewing the research and improving its offerings to reflect the realities of the Canadian ICT labour market. We continue to grow our connections with influential employers interested in hiring ICT talent and supporting the job matching process pre-arrival to maximize the opportunities for employers to have access to workers that are available and are coming to Canada. With more than 10 years of pre-arrival services, ICTC is ready to bring added expertise and industry influence to improve the experience for newcomers and employers.

ICTC's Indigenous Initiatives

2018-2019 has been our most exciting and eventful year for ICTC regarding our work with Canada's Indigenous peoples. With a wide array of developing relationships with communities, schools and Indigenous organizations; our activities centered primarily around education, skills development and training. Of particular note, ICTC's Digital DASH program was asked to participate in a council consultation regarding a First Nation community's involvement and advancements in the field of ICT academia. In addition, this year ICTC had the opportunity to speak at several conferences regarding our Indigenous skills development and training activities which include CANNEXUS, Indigenous Works' Linkages Conference, Tewatsentontho's STEM Conference and The University and College of the North's Linkages Conference. Lastly, ICTC gained sizable recognition thanks to our Northwestern Ontario's "Sioux Mountain Public School STEM MINI Conference" which brought together several Indigenous communities from Sioux Lookout and the surrounding area, in addition to over 100 Indigenous students.

ICTC also continued to improve our internal policies and procedures when working with Indigenous communities, establishing program specific advisory committees, new processes when working within an Indigenous community and a framework for hiring Indigenous staff in a culturally sensitive manner.

Women in ICT Initiatives / Women In Technology (WIT) Connect Initiative

The WIT Connect initiative is a national program to deepen and expand ICTC's gender-based measures and build a more inclusive measurable framework of solutions to increase gender parity and improve attraction, retention and advancement of women in the ICT Sector, based on feedback and shared knowledge from a cross-representation of women (in and not in STEM – including women who have exited or experienced barriers to entry) and input from employers and stakeholders in the sector.

Over the last twelve months, working collaboratively with partners across the country, the WIT Connect initiative has successfully engaged over 200 women nationally in sharing their experience and insights on gender bias and barriers women face in the ICT/STEM digital-based economy, and over 38 employers and stakeholders have also engaged in discussing these issues and challenges and sharing potential solutions. In the upcoming year, working on a Digital Economic Plan to have 15+ national strategic actions developed in collaboration with our partner ecosystem of private sector, education, government, community organizations and women in ICT/STEM that can be tracked and measured to determine their effectiveness in addressing gender bias and/or barriers to women in the ICT/STEM digital-based economy.

SPECIAL THANKS

ICTC Cybersecurity Leadership Council on Youth & Education
Thank you to the leaders for your advice and guidance on our youth and education cybersecurity initiatives and for your help in making CyberTitan possible.

National Leadership Taskforces
We would like to thank our Canadian Leadership Taskforce on Education and Skills, with special thanks to Dr. Bonnie Schmidt, our Chair, for their help on developing the ICT4ALL toolkit online for educators and the Digital Literacy and Skills Roadmap, that we launched in the fall.

RESEARCH AND CAPACITY BUILDING ADVISORS

Name	Role	Organization
Abbas Sarraf	Co-founder & Head of Product	Aimisio
Aisha Addo	CEO	DriveHer
Alex Jackson	CEO	Hone VR
Alexandre Leclerc-Gravel	Educator	CFP des Riverains
Amos Ngai	Associate Dean, School of Creative Technologies	Bow Valley College
Anette Ceraficki	Director of Talent & People Development	Benevity
Ann Mainville-Neeson	Vice President, Broadcast Policy and Regulatory Affairs	TELUS
Anne-Marie Scullion	Senior Manager, Education and Enterprise Marketing	Apple
Barb Carra	COO	Cybera
Barbatus Gatoto	Manager, Employer Liaison Services and Sectoral Initiatives	ESDC
Bhavani Krishnan	VP Program and Product Management	CENGN
Blair Littler	VP	Research Universities Council of BC
Brennen Jenkins	Manager of Strategic Initiatives	Council of Ministers of Education, Canada (CMEC)
Caitlin Patterson	Director of Marketing and Communications	Digital Nova Scotia
Cari Wilson	Educator	Ridgeview Elementary
Carol Howes	VP - Petro LMI	Energy Safety/Petro LMI
Cedric Mathieu	Managing Director	Turo Canada
Chad Leaman	Director of Innovation	Neil Squire Society
Charles Bazilewich	Senior Years Technology Education	Sisler High School
Charlyne Fothergill	Director of Career Services	Lighthouse Labs
Cheryl Probert	Talent Acquisition Manager	Solium
Cheryl Taylor	Educator	Ottawa District School Board
Cherylyn Cameron	Dean - Creative Technology Program	Bow Valley College
Chris Astle	Senior Sector Lead	Alberta Economic Development and Trade
Chris Hamoen	Founder, CEO	Account HQ
Chris Schulze	General Manager & VP of Special Projects	Suncor Energy
Christin Wiedemann	President	Radical IO/SCWIST
Christophe Villemer	Vice-président exécutif	Savoir-faire Linux Inc.
Corinne Prince	Director General	IRCC
Dan Heard	Senior Policy Analyst	ESDC
Daniela Mahac	People Manager	Uken Studios Inc.
Dave Robitaille	Director Corporate Citizenship	IBM
Dave Thomas	Software Development Manager	Benevity
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