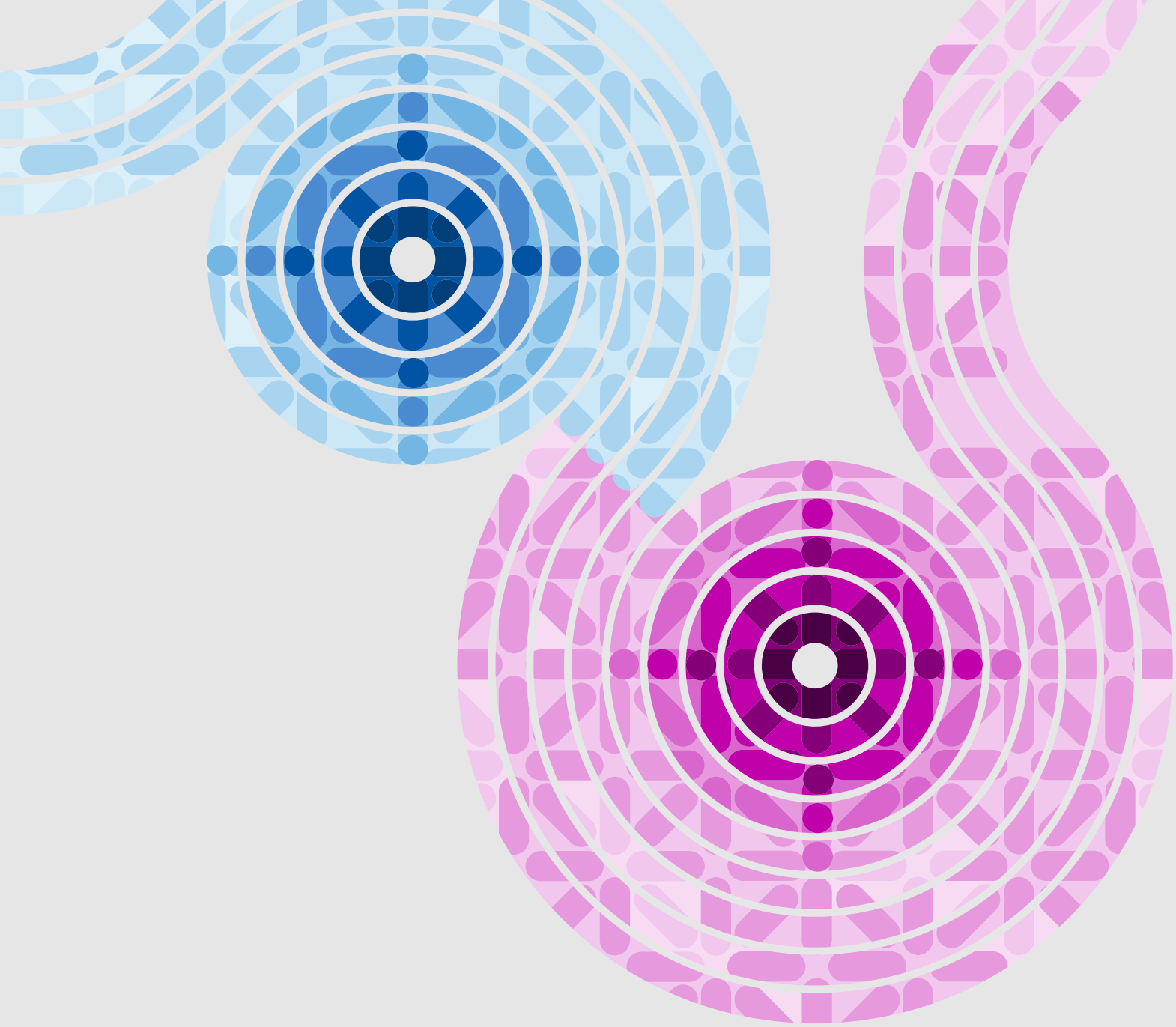


NPower Canada's Junior IT Analyst and Junior Data Analyst Programs

Final Report

November 2026

Future Skills Centre | Centre des Compétences futures

Blueprint

Acknowledgements

About the Future Skills Centre

The Future Skills Centre is a forward-thinking centre for research and collaboration dedicated to driving innovation in skills development so that everyone in Canada can be prepared for the future of work. We partner with policymakers, researchers, practitioners, employers and labour groups, and post-secondary institutions to solve pressing labour market challenges and ensure that everyone can benefit from relevant lifelong learning opportunities. We are founded by a consortium whose members are Toronto Metropolitan University, Blueprint, and Signal49 Research, and are funded by the Government of Canada's Future Skills Program.

About Blueprint

Blueprint helps leaders use data and evidence to tackle complex public policy challenges across Canada.

We partner with government, community, philanthropic, and industry leaders to strengthen public systems and deliver better outcomes. We bring together policy analysts, evaluators, economists, data scientists, and implementation experts—people who know how to turn insight into action. Our work is grounded in deep subject-matter expertise, rigorous methods, and a real-world understanding of how systems operate and evolve. More than just an advisor, we're also partners in change. We provide key support at every stage of the policy and program lifecycle: from early strategy and design to implementation, evaluation, and continuous improvement.

As a consortium partner of the FSC, Blueprint works with partners and stakeholders to collaboratively generate and use evidence to help solve pressing future skills challenges.

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The opinions and interpretations in this publication are those of the author(s) and do not necessarily reflect those of the Government of Canada.

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Preface

Canada's labour market is evolving rapidly, requiring responsive and evidence-based skills development programs. While many innovative programs emerge, scaling them beyond the pilot stage remains challenging. To address this, the **Future Skills Centre (FSC)** and **Blueprint** launched the Scaling Up Skills Development Portfolio and partnered with 11 organizations to support their scaling efforts. Blueprint works closely with each grantee to generate ongoing evidence, moving beyond the traditional 'one study at a time' approach to support continuous program improvement and scalability.

Aligned with the six-stage innovation cycle (see **Figure 1**), we focus on advancing interventions from the Delivery Phase (Stage 4) to the Scaling Phase (Stage 5), ultimately supporting Sustainable Systems Change at Stage 6. For more about our evidence generation approach and model, see our *Scaling Design Report*.

Figure 1 | The six-stage innovation cycle





1. Introduction

Founded in 2014, NPower Canada is a national workforce development charity. It creates pathways to economic prosperity for Canada's underserved youth and adults facing barriers to post-secondary education (PSE) and meaningful employment. During the period examined in this report, its **Junior IT Analyst (JITA)** and **Junior Data Analyst (JDA)**[1] programs provided 15 weeks of online digital and professional skills training as well as industry-recognized certifications, wraparound supports, and job placement services. They were designed to equip participants with the digital, professional, and job-search skills needed to obtain and retain high-quality digital and digitally enabled jobs.[2]

The programs used a dual-client workforce development model, meaning they were designed to meet the needs of both jobseekers and employers. Participants facing barriers received training and supports to prepare for and secure targeted jobs. Employers helped shape the curriculum, identify in-demand skills, and connect graduates to job opportunities while accessing a diverse pool of workers with the skills needed for junior-level digital roles.

1 JDA was recently relaunched as AI and Data Analytics, or AIDA. NPower Canada has also introduced Network Security Professional (NSP) program as an intermediate pathway for participants with previous education or experience in IT wanting to develop more specialized cybersecurity and network-security skills

2 NPower Canada uses the terms "digital" and "digitally enabled jobs" to refer to traditional IT and/or digital roles and roles across sectors where digital technologies or technical skills are important to the work. This includes roles that involve using or managing technology resources and information; analyzing or using data; maintaining networks or systems; troubleshooting technical issues; and supporting digitally driven business activities. NPower Canada assesses whether a role is 'digitally enabled' using available employment information, including job titles, departments, employers, industries, and job descriptions.

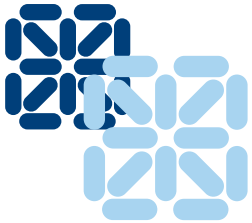
1.1. About this report

This report is part of Blueprint's Scaling Up Skills Development portfolio, an initiative funded by the Future Skills Centre (FSC). It presents findings from a randomized controlled trial (RCT) of JITA and JDA to examine program impacts on participant outcomes.

It is our second report on the RCT. Our *Interim Report* (June 2024) described the RCT design, methodology, reach, participant characteristics, and early findings on participant experiences and outcomes. This *Final Report* builds on the *Interim*, drawing on the full RCT dataset (May 2022 to July 2025) to present the study's first impact estimates. It details program design, our evaluation methodology, findings on participant reach and satisfaction, and estimates of program impacts. It contains five sections:

- **Context (pp. 7–10)** describes the labour market opportunities shaping program design.
- **About the programs (pp. 11–23)** explains JITA and JDA, their scaling journey, and how they were designed to help participants find digital and digitally enabled employment.
- **Methodology (pp. 24–36)** outlines our evaluation approach, learning agenda, RCT design, data sources, and limitations.
- **Findings (pp. 37–86)** presents results on program reach and participant experiences. It estimates program impact by comparing outcomes for program participants with outcomes for similar individuals who were assigned to a comparison group.
- **Discussion and conclusions (pp. 87–93)** summarizes our findings, key takeaways, and considerations for future iterations.

"NPower Canada creates pathways to economic prosperity for Canada's underserved youth and adults facing barriers to post-secondary education (PSE) and meaningful employment."





2. Context:
Labour market barriers and demand for digital skills

NPower Canada designed and adapted its programming in response to five labour market trends:

1	2	3	4	5
Young people without PSE credentials faced barriers to stable, well-paying work;	Industry-recognized training and recruitment pathways into Information and Communications Technology (ICT) roles were limited;	Demand for ICT and digital employment grew and changed;	The COVID-19 pandemic increased demand from adults seeking digital career pathways and interest from funders in supporting them; and	A post-pandemic labour market correction—and the rise of generative AI—has created new challenges for entry-level digital employment.

1. Young people without PSE credentials faced barriers to stable, well-paying work.

When NPower Canada launched JITA in 2014, 13.3% of young people aged 15 to 24 were unemployed. The rate was even higher among youth without a PSE credential: 15.3% compared with 8.5% who had completed a PSE certificate, diploma, or university degree.[3] Barriers to employment were also not experienced equally by all youth. In 2011, the unemployment rate was 20.5% among racialized youth compared with 15.7% among non-racialized youth.[i]

At the same time, the ICT sector offered promising opportunities for youth without PSE. Some entry-level roles could be accessed through technical training and industry-recognized certifications rather than a college or university degree or diploma. The sector was growing faster than the overall labour market, offered comparatively high wages, and was expected to continue expanding.[ii] The Information and Communications Technology Council projected substantial demand for ICT workers through 2019 and warned that employers could struggle to find staff with the right skills. Yet young people held only one in 20 ICT jobs, compared with one in seven jobs across the economy.[iii]

NPower Canada recognized that some youth—particularly those from underserved groups—could not or did not want to pursue PSE but needed pathways to stable, well-paying work.[iv] It also saw an opportunity to do so while helping employers find skilled talent.

2. Industry-recognized training and recruitment pathways into ICT were limited.

Despite the opportunities available in ICT, NPower Canada perceived few established training and recruitment pathways in Canada focused on connecting young people (and in particular, those without PSE credentials) to these jobs. Young people needed a way to build and demonstrate the skills employers required. Employers needed a reliable way to identify candidates who were prepared for entry-level roles.

NPower Canada drew on the model developed by the U.S. organization NPower Inc., which launched its first digital skills training program in 2002 to help underserved young adults enter junior-level digital roles. NPower Inc.'s model combined short-term, sector-focused training with industry-recognized credentials and direct connections to employers without requiring participants to return to PSE. Its approach aligned with a growing body of international evidence on the effectiveness of sector-focused employment programs. These included programs that created pathways into ICT careers for jobseekers facing barriers.[v]

3 "Without a completed post-secondary credential" includes Grade 8 or less, some high school, high school graduation and some post-secondary education. "Completed post-secondary education" includes a post-secondary certificate or diploma or a university degree. The rates were calculated by dividing the number unemployed by the corresponding labour force. See: Statistics Canada. (2026). *Labour force survey [Table 14-10-0020-01]: Unemployment rate, participation rate and employment rate by educational attainment, annual*. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410002001

3. Demand for ICT and digital employment grew and changed.

The digital labour market continued to expand over the decade following NPower Canada's launch. By 2024, Canada's digital economy employed 2.4 million people—51% more than in 2014.[vi] However, the nature of this demand changed. Growth increasingly centred on areas such as software, systems, technical support, and data. Cloud computing, cybersecurity, and AI changed the skills employers needed.

Digital tools also became more widely used across the economy: by 2024, more than half of ICT workers were employed outside the ICT sector.[vii] Employers increasingly needed people who could combine digital knowledge with professional skills and apply them across different roles and industries. For NPower Canada, this meant that its training and employment pathways needed to evolve alongside the digital labour market.

4. The COVID-19 pandemic increased demand from adults seeking digital career pathways.

During the pandemic, NPower Canada saw growing demand from adults, including newcomers, needing support to enter or re-enter the labour market through ICT and digital careers. Government and corporate funders also showed growing interest in supporting employment programs that could help adults upskill or reskill for digital employment.[viii] In response, in 2021, NPower Canada expanded eligibility to people of all ages and introduced JDA, a more advanced pathway serving participants who often brought more education or work experience.

For many newcomers, existing qualifications and experience did not always lead to work that used their skills. In 2024-25, 32.6% of recent immigrants with PSE qualifications reported being overqualified for their jobs compared with 19.1% of Canadian-born workers.[ix] NPower Canada's expansion reflected the desire to help a broader group of jobseekers translate their existing skills and new training into ICT and digital employment.

"Some entry-level roles could be accessed through technical training and industry-recognized certifications rather than a college or university degree or diploma."



5. A post-pandemic labour market correction—and the rise of generative AI—has created new challenges for entry-level digital employment.

ICT growth has not been steady. Demand for digital employment increased rapidly as organizations moved more of their operations online during the pandemic. The RCT began in 2022, as the labour market was moving from this period of rapid expansion toward slower and less consistent growth. By 2024, ICT sector employment had declined by 1.2% even as employment across the economy grew by 1%.[x]

Meanwhile, the growing adoption of generative AI began reshaping entry-level digital work. Recent research by the Burning Glass Institute and NPower Inc. found that AI is having an outsized effect on entry-level roles. AI can automate many of the tasks through which workers have traditionally gained early-career experience.

Among the 52 technology roles examined, those with the greatest vulnerability to automation included data analyst, business analyst, data operations assistant, and helpdesk associate. Other roles, such as field service technician, desktop engineer, and cybersecurity analyst, had lower exposure because they relied more heavily on hands-on work, judgement, and interpersonal skills.[xi]

Together, these trends shaped both NPower Canada's original model and how it evolved. The next section describes how its dual-client model responds to the needs of jobseekers and employers in this changing digital labour market.

3. About the programs

This section describes the purpose, evolution, design, intended outcomes, and participant journeys for the JITA and JDA programs. It describes the development of NPower Canada's programs and evidence base: from the launch of JITA and its early evaluation through new training pathways, expansion into new regions and populations, and the launch of the RCT. It also explains how NPower Canada's model has continued to evolve since the RCT began.

3.1. Program purpose, evolution, and scaling

Over the last decade, NPower Canada has grown from a single workforce development program serving young adults in the Greater Toronto Area (GTA) into a national workforce development charity offering training pathways across six provinces and both official languages. It has taken an iterative approach to growth, adapting programs in response to changing employer needs, shifts in applicant populations, technological advancements, and lessons from evaluation findings and delivery.

3.1.1. Initial development and early evidence

NPower Canada was established in the GTA in 2014 as an independent Canadian organization affiliated with NPower in the U.S. Its initial focus was to adapt NPower's workforce development model to the Canadian labour market and funding context.

Its first program, the Junior IT Analyst, or JITA program, was launched in the same year. JITA was designed to support people aged 18 to 30 facing barriers to PSE and meaningful employment. It prepared participants for entry-level digital and digitally enabled roles through 15 weeks of technical and professional skills training, as well as industry-recognized certifications, job placement, and wraparound supports. Programming was delivered directly by NPower Canada staff and community partners.

In 2019, NPower Canada received funding from FSC to evaluate JITA over two years. Led by Blueprint, this evaluation examined whether the program was helping young adults facing barriers access high-quality jobs. It identified opportunities to strengthen program delivery, evaluation, data collection, and reporting. It also found promising outcomes: among participants who graduated before the pandemic, 90% had secured employment or enrolled in further education within six months of completion.

3.1.2. Geographic expansion and online delivery

NPower Canada began expanding beyond the GTA in 2019, when it extended delivery to Alberta. In 2020, it shifted from in-person to online delivery in response to COVID-19. Participants completed digital skills training through Coursera and took part in online, instructor-led programming and supports, allowing JITA to continue without in-person delivery requirements.

Online delivery enabled NPower Canada to expand further by allowing people to participate from a broader range of communities. In 2021, NPower Canada expanded across British Columbia and Nova Scotia and broadened its service area in Ontario beyond the GTA. It expanded to selected parts of Quebec in 2022 and across Manitoba in 2023.

Online delivery was funded by FSC, ESDC, Google.org, Microsoft, Digital Technology Supercluster, and RBC Future Launch, among others, in addition to the governments of Alberta, British Columbia, Manitoba, Ontario, Quebec, and Nova Scotia.

3.1.3. Expansion to new populations and program pathways

As NPower Canada grew, it began serving individuals with a wider range of ages, education levels, work experiences, and career histories. From 2020 to 2021, the organization piloted adult reskilling through ReNEW, a part-time program for adults seeking to strengthen their technical skills or prepare for new roles. In 2021, selected JITA and JDA cohorts opened to adults aged 31 and older, then formally expanded eligibility to this age group in 2022.

NPower Canada was also seeing growing demand from more experienced applicants. These included mid-career workers affected by the pandemic and newcomers who could not find employment matching their skills and experience. These applicants were more likely to have PSE credentials or previous education and work experience in areas such as data, IT, and computer science.

In response to this changing applicant population—as well as growing employer demand for workers with data analysis skills—NPower Canada launched the Junior Data Analyst program, or JDA, in 2021. JDA was designed as a more advanced and focused pathway than JITA, preparing participants for roles involving data collection, management, and visualization. It had higher skill requirements at entry and offered different technical training and certifications. Although its technical content differed, JDA used the broader JITA model of professional skills development, wraparound supports, career coaching, and job placement support.

3.1.4. The RCT

In 2021, NPower Canada became part of the Scaling Up Skills Development portfolio, an FSC-funded initiative that generates evidence about the effectiveness and scalability of promising skills interventions. Through this portfolio, FSC funded the design and implementation of the JITA and JDA RCT and broader evaluation. The first RCT cohort began in May 2022, and data collection concluded in July 2025. The trial was conducted in Ontario and Alberta: the two most established delivery regions. The RCT's goal was to determine whether JITA and JDA improved participant outcomes relative to other available services and supports. The broader evaluation also explored program implementation and how the programs operated as they scaled.

3.1.5. The current NPower Canada model

As of 2026, NPower Canada offers three core training pathways: JITA, AI & Data Analytics (AIDA), and Network Security Professional (NSP). These 15-week programs differ in their technical content, entry requirements, and intended roles, but they share a common model. Each combines industry-recognized certifications and digital and professional skills training with wraparound supports, career coaching, and job placement support. The programs are intended to help young people and adults facing barriers obtain and retain high-quality digital and digitally enabled jobs.

NPower Canada uses a dual-client model intended to meet the needs of participants and employers.

Participants receive training and support to prepare for, secure, and retain employment. Employers are engaged through NPower Canada's Industry Council and broader employer network. The Industry Council is a formal advisory body composed of leaders from organizations that employ junior- to mid-level digital talent. It helps NPower Canada identify changing skill needs and workforce trends and provides input into program design and curriculum. The broader employer network shares information about hiring needs, participates in workplace tours, job shadowing, and mentorship, and connects graduates with recruitment opportunities and job openings.

NPower Canada continues to adapt its programs with guidance from its Industry Council and employer network. JDA was enhanced and relaunched as AIDA, with more AI-focused content, greater modularity, and additional stackable certifications. NPower Canada introduced NSP as an intermediate pathway for participants with previous education or experience in IT wanting to develop more specialized cybersecurity and network-security skills. More broadly, NPower Canada is moving toward a more modular, customizable approach that can respond to different learners, employers, and industries. As part of this work, it is developing and exploring sector-specific pathways in mining and minerals analytics and healthcare data and AI. It is also developing programming focused on foundational digital skills and readiness for digital trades.

Because NPower Canada's model continued to evolve after the RCT, its current programs may differ from the versions of JITA and JDA that Blueprint evaluated. Our RCT findings apply to the programs delivered during the trial and do not estimate the impacts of NSP, AIDA, or other pathways.

Table 1 (on the next page) shows key milestones in the evolution and scaling of JITA and JDA.

"Employers helped shape the curriculum, identify in-demand skills, and connect graduates to job opportunities."



Table 1 | The evolution and scaling of JITA and JDA

Years	Funders
2014	• NPower Canada launches in the GTA. • JITA launches as its first program, serving young adults aged 18 to 30.
2019	• JITA expands to Alberta. • NPower Canada receives FSC funding for a two-year evaluation of JITA, led by Blueprint.
2020	• All programs move fully online in response to COVID-19. • An adult reskilling program is piloted through ReNEW.
2021	• JDA launches. • NPower Canada joins the FSC-funded Scaling Up Skills Development portfolio. • NPower Canada expands to British Columbia, Nova Scotia, and beyond the GTA in Ontario. • Core programming opens to adults aged 31+ in selected cohorts. • Blueprint and NPower Canada begin designing the FSC-funded RCT.
2022	• NPower Canada expands to Quebec. • JITA and JDA officially expand eligibility to adults aged 31+. • The first cohort of the FSC-funded RCT begins in May 2022.
2023	• NPower Canada expands to Manitoba.
2024	• The final RCT cohort completes programming.
2025	• Data collection for the RCT completes.
2026	• JDA is enhanced and relaunched as the AIDA program. • NPower Canada introduces the NSP program.

3.2. Model design

While JITA and JDA have different target populations and training content, they have a similar length, sequence, and set of services. Below, we describe their target populations, recruitment and admissions processes, components, and intended outcomes.

3.2.1. Target population and eligibility

JITA and JDA were designed for participants facing unemployment, underemployment, financial barriers, or other barriers to stable employment. Both serve groups underrepresented in IT and digital employment, including Black, Indigenous, and other racialized people, women and non-binary people, 2SLGBTQI+ people, immigrants to Canada, and people with disabilities. In 2023, NPower Canada announced that it had achieved gender parity in access—a longstanding organizational goal.

Each program is designed for participants with different starting points, skills, and career goals:

- **JITA** is an entry-level pathway for participants seeking to build foundational digital and professional skills for junior digital and digitally enabled roles.
- **JDA** (now AIDA) was a more advanced pathway for participants with stronger baseline skills, more work experience, and/or higher levels of education, including mid-career workers and newcomers with education and/or experience in areas such as data, IT, and computer science.

Table 2 shows eligibility criteria and the additional experiences and/or interests needed for JDA.

Table 1 | The evolution and scaling of JITA and JDA

Core eligibility criteria	
Age	• Be at least 18 years old at program start date.
Location	• Reside in the program's catchment area.
Immigration and work status	• Have legal status in Canada, such as Canadian citizenship, permanent residency, or a valid work permit, and have a valid Social Insurance Number. • If holding an open work permit, have a permit that is valid for at least one year beyond the program start date. • Be eligible to work full-time in Canada.
Income and employment status	• Have a household income below $100,000 and an individual income below $40,000. • Be facing unemployment, underemployment, financial barriers, or other barriers to employment. • Be available to begin employment within three to nine months.

Career goals	• Be seeking full-time employment in digital or digitally enabled roles in Canada after completing the program.
Language	• Demonstrate advanced English-language proficiency, or French-language proficiency in Quebec. • For non-native English speakers, have a Canadian Language Benchmark (CLB) score of 7 or higher.
Education and prior training	• Have a high school diploma, GED, CAEC, or recognized high school equivalent from Canada or internationally. • Not be currently enrolled full-time in PSE. • Not be confirmed for future full-time PSE enrolment. • Not be studying in an ICT or digital technology-related program, part- or full-time. • Not hold equivalent or more advanced certifications than those offered as part of JDA or JITA, as determined by NPower Canada. • Have basic computer skills, including typing, email, and internet navigation. • Not have previously completed an NPower Canada core program.
JDA-specific eligibility criteria	
• Have experience or interest in SQL (Structured Query Language). • Have knowledge of statistics and calculus. • Have experience with R or Python statistical programming.	

3.2.2. Recruitment and admissions

Recruitment. Participants are recruited through marketing and advertising, information sessions, and referrals from community partners and NPower Canada alumni. These partners include nonprofits, schools, grassroots organizations, places of worship, and youth groups. NPower Canada also receives referrals through publicly funded employment services and income assistance systems, where staff or caseworkers identify people in their caseloads who may be a good fit. During the RCT, NPower Canada actively sought referrals from Ontario Works caseworkers through Purchase of Employment Services (POES), a City of Toronto program.

Applications. Interested parties complete an online application form. Applications are considered on a rolling basis. Applicants can contact NPower Canada's outreach team if they require support completing the application.

Admissions. Applicants who appear to meet program requirements are invited to complete an interview, technical assessment, group information session, and/or other preparatory activities. These

steps usually take place one to two months before training begins and are used to assess eligibility, fit, motivation, and readiness. NPower Canada determines whether eligible applicants are best suited to JITA or JDA. During the RCT, youth applicants were prioritized over applicants aged 31+ and generally were not placed on a waitlist. Ontario Works referrals in Toronto and applicants receiving government disability benefits were also prioritized. First Nations, Métis, and Inuit applicants were prioritized for admission and were not included in randomization for the RCT.

Cost. JITA and JDA are free for participants.



"The programs used a dual-client workforce development model, meaning they were designed to meet the needs of both jobseekers and employers."

3.2.3. Program components

Training. During the RCT, participants received 15 weeks of online training to prepare for digital and digitally enabled roles. The programs use a flipped classroom model, where participants review core concepts independently before applying skills through instructor-led sessions, assessments, and practical activities. Instructors reinforce key concepts and deliver modules leveraging experiential learning. Both JITA and JDA include technical training, professional skills development, work-simulated learning through group and individual deliverables, career coaching, assessments, industry speakers, interview practice, and résumé workshops.

- **JITA training** focuses on the skills used in entry-level IT support and digitally enabled customer support roles, such as help desk specialist, junior systems administrator, customer care agent, and service technician. Participants learn skills related to computer hardware, wireless networking, end-to-end customer support, troubleshooting, and debugging. Those who complete JITA earn the Google IT Support Professional Certificate and/or Cisco IT Essentials.[4]
- **JDA training** focuses on the skills used in data-related and digitally enabled business roles, such as junior data analyst, junior database specialist, business analyst, project analyst, and junior database administrator. Participants build skills in data science fundamentals, Python, machine learning principles, AI, and Microsoft Azure. Those who complete JDA earn the AI-900 Microsoft Azure AI Fundamentals certification and/or the IBM Data Analyst Certificate.

4 NPower Canada's current JITA program offers the Google IT Support Professional Certificate and Google AI Essentials Certificate.

Job placement. Job-matching specialists assess participants' skills, goals, and support needs and liaise with employers and graduates to identify suitable job openings within NPower Canada's employer network and beyond. Matching is not limited to positions with conventional IT job titles. Specialists may also identify digitally enabled roles in which digital tools, data, or technical knowledge are important to job performance. Graduates receive job-search support to help them find postings, prepare applications, and navigate hiring processes.

Wraparound supports. NPower Canada identifies participants' needs during the admissions process and provides individualized follow-up through Career Specialists and its Wraparound Support team. Supports available include a technology loaner program; employment and life skills coaching tailored to participants' identities and circumstances; coaching related to disability disclosure; and learning accommodations, such as advance access to course materials, workshop recordings, flexible participation requirements, and case-by-case extensions. When participants require other services, staff share tailored resources and connect them with community organizations. Referrals may address childcare and caregiving, housing, food and financial needs, mental health and crisis support, immigration and settlement, language learning, legal services, substance use, temporary employment, and needs specific to participants identifying as 2SLGBTQ+, racialized, and disabled.

Alumni services. Graduates receive at least five years of career development services. These include job retention coaching, support with continuing education, opportunities to earn additional credentials at no cost or at discounted rates, connections to industry mentors, and access to networking opportunities.

Employer engagement. NPower Canada engages regularly with employers to understand hiring needs, connect participants to workplace learning opportunities, and support graduates' transitions into employment. Employers and the Industry Council help shape program curricula so training stays aligned with evolving labour market needs. Employer partners may also provide workplace tours, job shadowing, mentorship, industry speaker sessions, recruitment opportunities, and job openings for graduates.

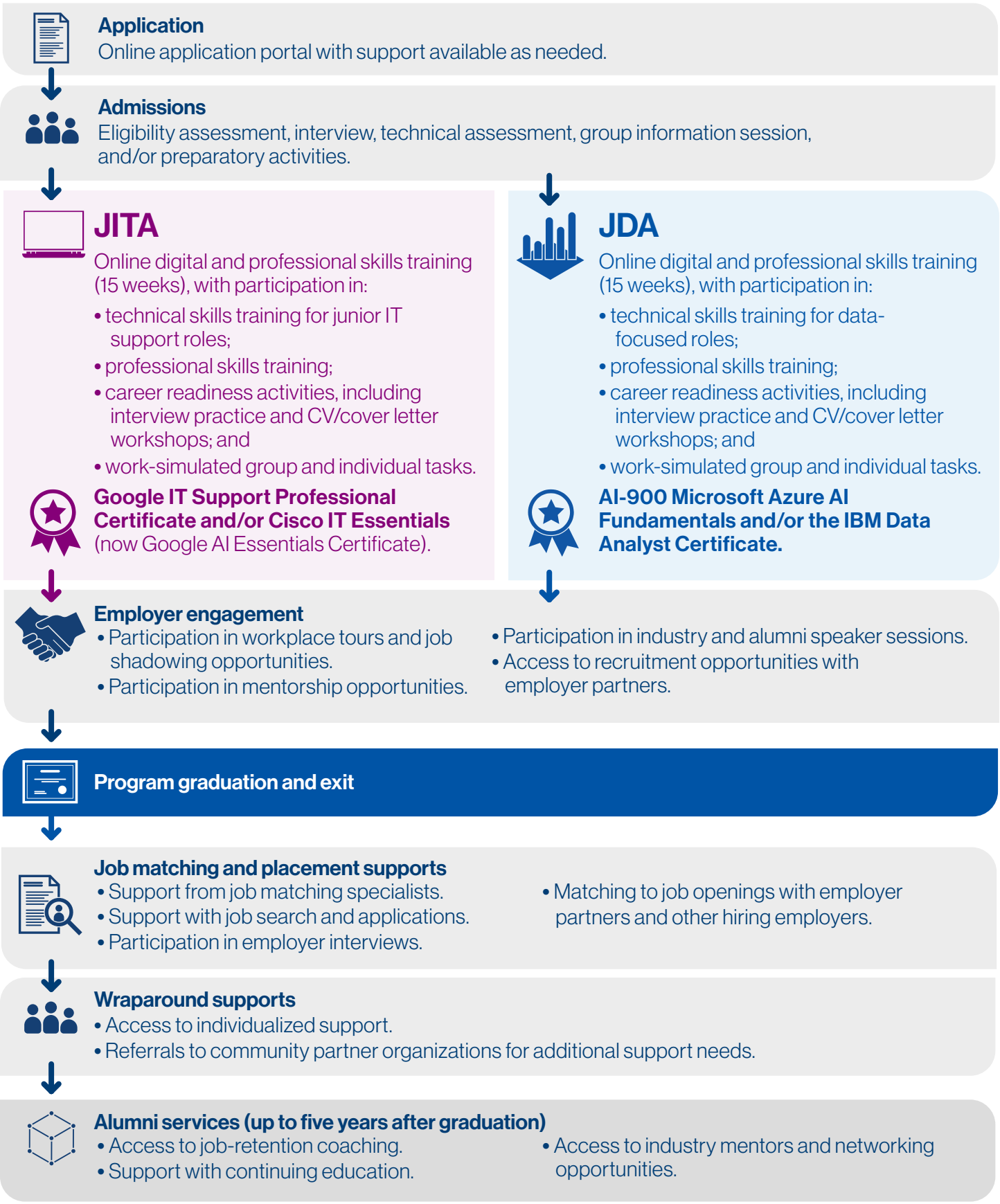
Roles and sectors. NPower Canada connects graduates with a broad range of digital and digitally enabled roles across sectors. These include traditional IT positions, such as help desk, technical support, systems administration, and database roles. They also include administrative, social services, customer service, operations, and other positions outside conventional IT classifications in which digital tools, data, or technical knowledge are important to the work.

Depending on the role, graduates may manage technology resources and information, analyze and use data, maintain networks and systems, troubleshoot technical issues, support digitally driven business activities, and provide customer and technical support. Employers have included technology and digital firms, telecommunications companies, financial institutions, retailers, public sector organizations, consulting firms (such as Deloitte and Accenture), staffing agencies, and customer-service providers. During the RCT, top employers included Telus, HGS, Concentrix, Walmart, Randstad, Amazon, CIBC, Rogers Communications, RBC, TD Bank, the City of Toronto, Best Buy Canada, Scotiabank, and Canada Post.

NPower Canada considers job responsibilities, not only job titles or sectors, when assessing whether a graduate's position is digitally enabled. It collects information from graduates and, where available, employers, including job titles, departments, sectors, job descriptions, and other information about responsibilities. This approach is intended to capture employment in which digital skills are central to the work even when the position is not formally classified as an IT occupation.

Figure 2 (on the next page) provides a visual illustration of the participant journey.

Figure 2 | Participant journey



3.2.4. Intended outcomes

JITA and JDA aim to support the following participant outcomes:

- **Digital, technical, and professional skills.** Participants build digital, professional, job search, and career-planning skills.
- **Employment.** Participants move into digital and digitally enabled roles that align with their program, skills, and career goals.
- **Earnings.** Participants increase their earnings.
- **Job quality.** Participants move into jobs with benefits, opportunities for advancement, satisfaction, and stability.
- **Job retention and advancement.** Participants retain employment and advance in their careers over time.
- **Social assistance receipt.** Participants who were receiving social assistance at referral move into employment and exit the social assistance caseload.

3.2.5. Delivery approach

NPower Canada leads delivery, including admissions, training, career readiness supports, job matching, and job placement. As noted, participants with further support needs (e.g., childcare, mental health, housing, etc.) may be referred to services from community partners.

NPower Canada receives delivery support from employers, its Industry Council, funders, alumni, community partners, and publicly funded employment services and income assistance systems. These groups inform curricula, support recruitment, connect participants to supports, and create pathways into employment.

Table 3 summarizes the roles stakeholders play in delivering and supporting the programs.

Table 3 | NPower Canada delivery roles and partners

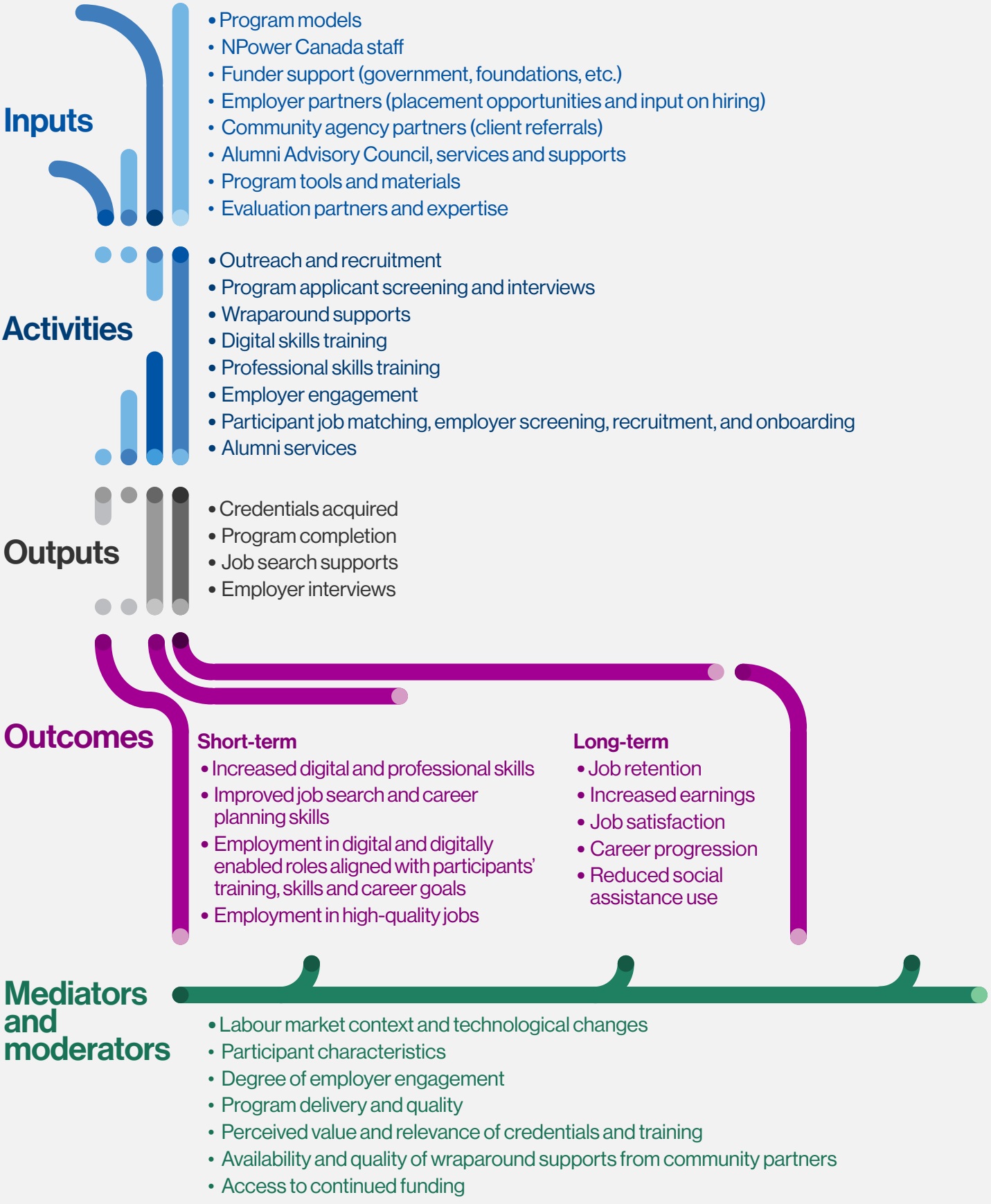
Organization	Role
NPower Canada	Leads delivery of JITA and JDA, including admissions, training, career readiness supports, job matching, job placement, alumni services, and employer engagement.
Industry Council	Provides input on curriculum and helps ensure participants are building technical and professional skills relevant to employer needs. The industry council includes leaders from organizations that hire junior and mid-level IT and digital talent.
Employer network	Provides input on hiring needs and helps NPower Canada tailor programming to changing labour market needs. May support the program through workplace tours, job shadowing, mentorship, industry speaker sessions, recruitment opportunities, and job openings for graduates.

Organization	Role
Funders	Provide financial support for program delivery, scaling, and evaluation. Funding comes from a mix of government, corporate, and foundation sources.
Alumni Advisory Council	Provides input from an alumni perspective to help ensure curriculum, wraparound supports, employment services, and alumni services respond to the priorities of participants and graduates. May also support outreach to other jobseekers facing employment barriers.
Community partners	Support recruitment and outreach and may provide referrals to additional services for participants with support needs. Community partners include nonprofits, schools, grassroots organizations, ethno-cultural organizations, places of worship, and youth-led groups.
Publicly funded employment services and income assistance systems	Refer potential participants who may be a good fit for JITA or JDA.

3.3. Theory of change

Table 4 (on the next page) presents our theory of change for JITA and JDA. It outlines the inputs, activities, outputs, and pathways to intended participant outcomes. It also identifies factors that may produce these outcomes (mediators) and affect when and for whom they occur (moderators). Some are beyond NPower Canada's control, like labour market conditions, while others can be influenced through decisions about program design, partner selection, and delivery.

Table 4 | JITA and JDA theory of change



4. Methodology

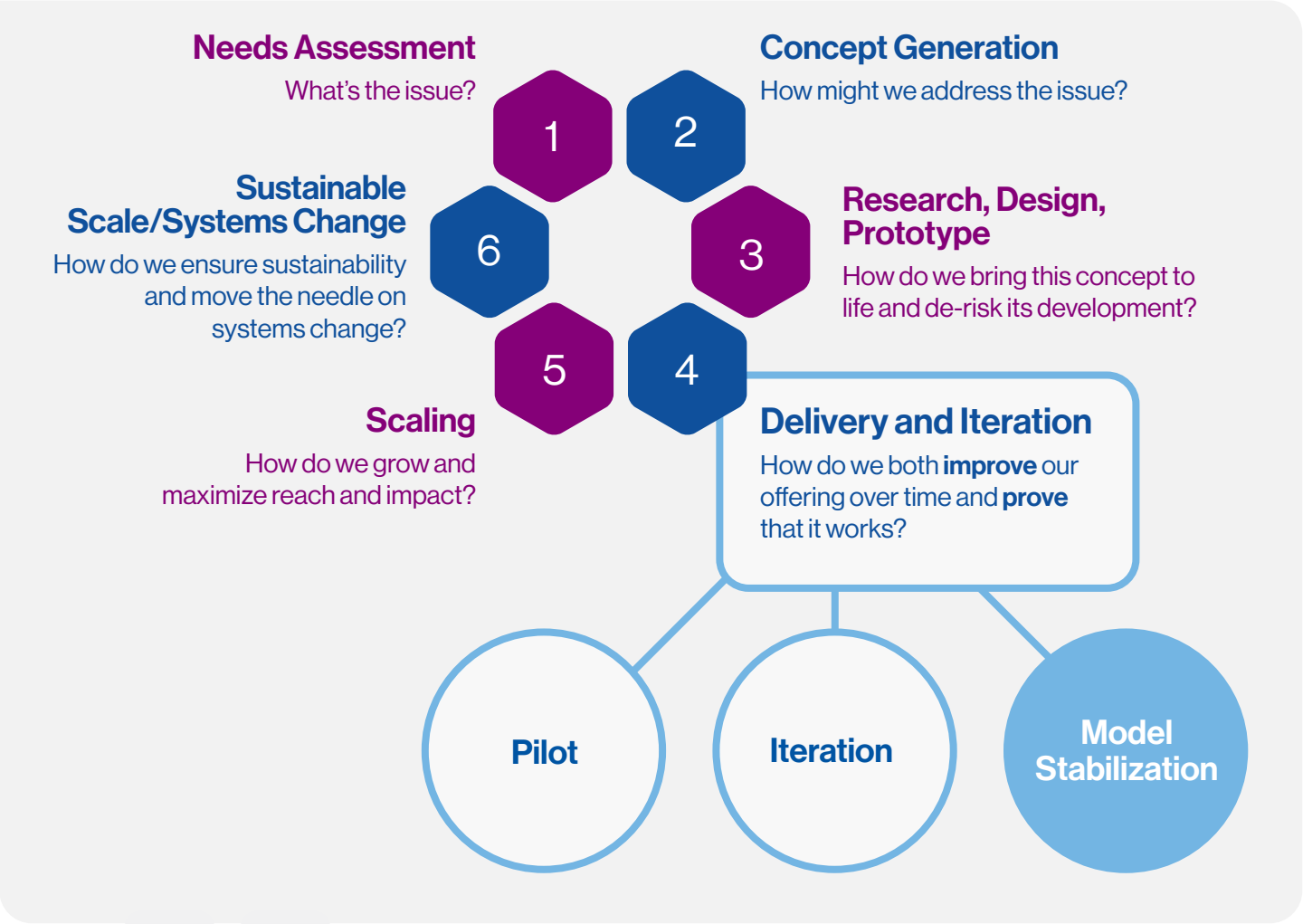
4.1. Blueprint's evidence generation approach

Since its launch in 2014, JITA has evolved into a multi-site program serving diverse groups of participants across Canada. Through repeated delivery, refinement, and scaling, it has demonstrated promising outcomes and become stable, consistent, and codified. Though a newer program, JDA was developed using the same structure and delivery architecture as JITA and was designed in close collaboration with employers. This allowed JDA to also become a stable, codified model rapidly while responding to demand for data-focused skills and roles.

As such, we place both JITA and JDA in **Stage 4: Delivery and Iteration** of our innovation cycle, introduced in the **Preface** on p. 5. Within Stage 4, both programs are in **Stage 4c: Model Stabilization**, as shown in **Figure 4** (on the next page). This phase focuses on generating rigorous evidence on outcomes and impact.



Figure 4 | The six-stage innovation cycle and Stage 4: Delivery and Iteration sub-phases



4.2. Learning agenda

For each project in the Scaling Up Skills Development portfolio, Blueprint examines program reach, participant experiences, and effectiveness. In this evaluation, we use an RCT to estimate the impacts of JITA and JDA on employment, earnings, job quality, education, and social assistance outcomes. We also estimate the economic and fiscal costs and benefits associated with the programs and their projected return on investment over time. Because JITA and JDA are distinct programs serving different groups, we assess each program separately.

Specifically, we address the following questions:

Program reach

- Did JITA and JDA reach their target populations?

Participant experiences

- Did participants complete the programs?
- Were participants satisfied with them?

Program effectiveness

- Compared to their comparison groups, were JITA and JDA participants more likely to experience gains in:
  - employment, full-time employment, and employment in an IT or digitally enabled role;
  - earnings; and
  - quality of employment, including job satisfaction, opportunities for advancement, and access to employer-provided benefits?

Cost-benefit analysis

- What is the net benefit of delivering JITA and JDA from the perspective of both society and government?

Blueprint uses a Common Outcomes Framework, detailed in **Appendix A**. This provides a consistent set of outcome measures applied to all Scaling Up Skills Development projects, enabling cross-project and portfolio-level comparisons. However, not all outcomes are relevant to each project and evaluation. For this evaluation, educational enrolment and receipt of social assistance were treated as supplementary rather than core outcomes. Increased educational enrolment is not a primary objective of JITA or JDA, while only a small proportion of program and comparison group members received social assistance at baseline. Results for these outcomes are presented in **Appendix B**.

4.3. Evaluation design

Reach and participant experiences. We analyzed participants' socio-demographic data to assess whether JITA and JDA reached intended target groups. To assess participant experiences, we examined administrative data on completion rates and satisfaction-related data collected through an exit survey and participant interviews.

Effectiveness (causal impact). Our evaluation of effectiveness focused on JITA and JDA's intended outcomes, including employment, employment in digital or digitally enabled roles, earnings, and job quality. However, outcomes cannot be interpreted in isolation; participants may experience success for reasons unrelated to the program, such as broader economic conditions or their individual characteristics. To address this challenge, we conducted an RCT to determine whether being offered a seat in JITA and JDA led to better outcomes compared with similar individuals who were not offered a seat. An RCT randomly assigns individuals from the same population to a program group, whose members are offered the program, or to a comparison group, whose members are not offered the program. Random assignment should create groups that are equivalent across both observed and unobserved characteristics so that any differences in outcomes can be attributed to being offered access to the program—the sole element distinguishing each group. Comparing outcomes in this way is widely considered the most credible method for assessing a program's causal impact. See **section 4.4. RCT design and participant sample** for further details.

Cost-benefit. We used the estimated impacts of JITA and JDA as well as NPower Canada's program delivery costs to project each stream's potential social and fiscal costs and benefits over 10 years. We specifically considered costs and benefits for society overall, as well as the specific subset of costs and benefits experienced by government. Our analysis included program delivery costs, increased participant earnings, increased tax revenue, and reduced transfer payments **where the evaluation identified an effect**. Because there is uncertainty about how JITA and JDA impacts may change over time, we developed three scenarios—in which effects remain consistent, decrease, or increase.

Future impact analysis. We are pursuing longitudinal data collection by working with Statistics Canada. We are using administrative data in its Social Data Linkage Environment to measure longer-term impacts on participant employment, earnings, education, and other outcomes for FSC project participants. We anticipate that full-sample data linkage will be accessible in the Statistics Canada virtual lab in late 2026. These data will also allow us to update the cost-benefit analysis using observed longer-term impacts rather than projections based on outcomes measured 12 months after participation.



4.4. RCT design and participant sample

As noted above, the RCT compares outcomes for participants offered a seat in JITA or JDA with outcomes for similar individuals who were not. This allows us to estimate the causal impact of each program separately. This RCT includes four groups:

1 **JITA program group** Participants who were offered a seat in JITA.	3 **JDA program group** Participants who were offered a seat in JDA.
2 **JITA comparison group** Similar individuals to those above who applied to and were eligible for JITA but were not offered a seat.	4 **JDA comparison group** Similar individuals who applied to and were eligible for JDA but were not offered a seat.

For each cohort, NPower Canada screened applicants for eligibility to determine whether they were best suited to JITA or JDA. Applicants were sorted into each program before random assignment. Applicants were then enrolled in the RCT. NPower Canada sent Blueprint separate lists of eligible JITA and JDA applicants and the number of available seats in each program. Blueprint then randomized JITA and JDA applicants separately. Applicants were assigned to the program group (i.e., a seat in JITA or JDA) or to the comparison group.

Notably, applicants from some priority groups were offered guaranteed enrolment rather than being randomly assigned to a group. As such, they were not included in the randomized comparison used to estimate impacts. Priority groups included Indigenous applicants, applicants receiving government disability benefits, and Ontario Works recipients referred to NPower Canada through the City of Toronto's Purchase of Employment Services (POES) program.

RCTs commonly assign applicants to program and comparison groups in equal proportions. However, because NPower Canada wanted to maximize the number of applicants able to participate, we based the assignment ratio on the number of available program seats. Before the RCT, NPower Canada committed to randomly assigning at least 20% of eligible applicants to the comparison group. During the RCT, available seats could accommodate 79% of eligible applicants, so the remaining 21% were assigned to the comparison groups. This allowed NPower Canada to train as many eligible applicants as possible.

The design preserved random assignment, meaning that the program and comparison groups were still expected to be similar at baseline. However, assigning only 21% of applicants to the comparison groups resulted in unequal group sizes and relatively small comparison groups. Both factors reduced statistical power and made program effects more difficult to detect.

Figure 4 presents the eligibility, streaming, randomization, consent-to-research, and participation results for JITA and JDA. As the figure shows:

- **4,343 applicants** were screened as eligible for JITA. Of those applicants,
  - **2,653 (61%)** consented to participate in the research.
  - **2,055** consenting participants were assigned to the program group.
  - **598** consenting individuals were assigned to the comparison group.
  - **1,690** applicants who did not consent were excluded from the research.
- **1,957 applicants** were screened as eligible for JDA. Of those applicants,
  - **1,236 (63%)** consented to participate in the research.
  - **1,012** consenting participants were assigned to the program group.
  - **224** consenting individuals were assigned to the comparison group.
  - **721** applicants who did not consent were excluded from the research.

Figure 4 | Consent and randomization process and participation results

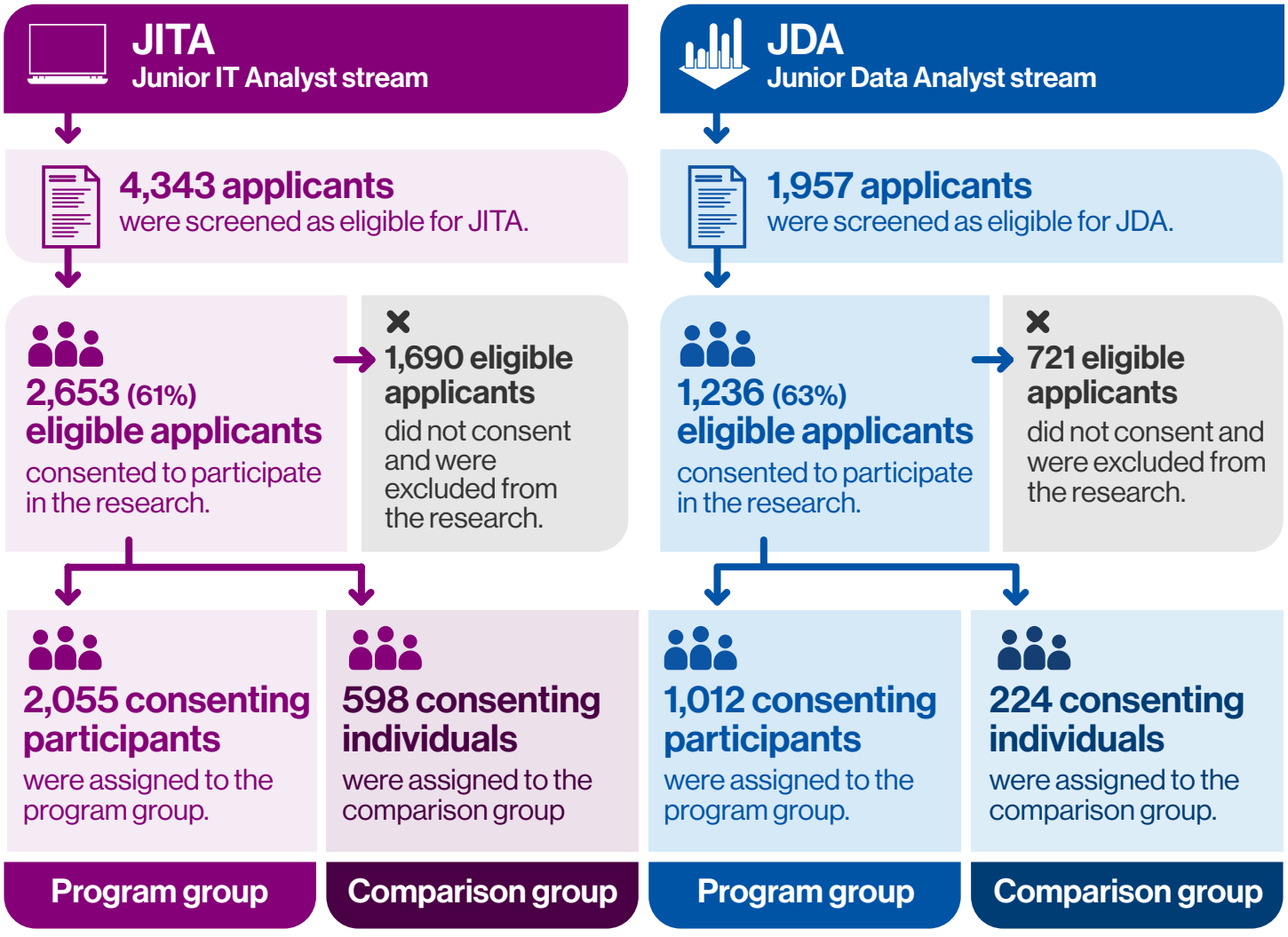


Table 5 presents socio-demographic profiles of program participants and comparison group members. As shown, randomization produced generally balanced groups across key participant characteristics, supporting fair outcome comparisons between program and comparison groups.

Table 5 | Key sample characteristics

		JDA program group (N=1,012)	**JDA comparison group** (N=224)	**JITA program group** (N=2,055)	**JITA comparison group** (N=598)
Equity-deserving groups	Any[5]	97%	98%	94%	94%
	Black	19%	12%	34%	37%
	Indigenous Peoples[6]	0%	0%	0%	0%
	BIPOC	96%	98%	93%	92%
	Persons with disabilities	2%	1%	5%	4%
	2SLGBTQ+	4%	3%	7%	8%
	Woman+[7]	53%	54%	57%	58%
Age	Under 30	49%	52%	45%	45%
	30–50	49%	46%	52%	52%
	Over 50	2%	3%	4%	3%
Immigration status	Born in Canada	17%	21%	34%	32%
	Immigrant	83%	79%	66%	68%
	Newcomer (<5 years in Canada)	72%	66%	56%	58%

5 Includes anyone who identifies as BIPOC, having a disability, being 2SLGBTQ+, and/or having a gender identity that is not cis man.

6 The number of Indigenous persons in each category rounds to 0% because NPower Canada exempted Indigenous participants from random assignment. Therefore, these participants are not included in the RCT sample.

7 The woman+ category includes participants who identify as any of the following in NPower Canada's administrative data: female, cis woman, trans man, trans woman, non-binary, agender, bigender, two spirit, or questioning/unsure. As an analytical category, it intends to represent individuals who may experience systemic barriers due to their sex and/or gender without compromising respondent privacy.

		JDA program group (N=1,012)	JDA comparison group (N=224)	JITA program group (N=2,055)	JITA comparison group (N=598)
Level of education	High school diploma	100%	100%	100%	100%
	Any PSE credential	96%	95%	78%	76%
Employment	Under one month	43%	40%	37%	36%
	1–6 months	18%	14%	14%	11%
	7–12 months	57%	60%	63%	64%
Hours worked per week	Employed	43%	40%	37%	36%
	Employed full-time	18%	14%	14%	11%
	Unemployed	57%	60%	63%	64%
Earnings	Earnings under $25,000 per year	77%	81%	80%	81%
Financial ssistance	Receiving EI	77%	81%	80%	81%
	Receiving social assistance	4%	4%	5%	6%
	None of the above	9%	8%	15%	17%

Source. Power Canada administrative data

4.5. Impact estimation method

4.5.1. Sample inclusion

Our analytic sample included everyone who consented to the evaluation, even if they did not accept their seat in JITA or JDA; started but did not finish the training; or withdrew after randomization. This is known as the **intent-to-treat (ITT) effect** and is standard in RCTs. It treats participation as being assigned to one of the program groups regardless of training completion. Doing so ensures results better reflect the real-world effect of being offered a place in JITA or JDA.

Where sample sizes allowed, we conducted analyses using the subset of participants who completed all surveys at program exit and at the six- and 12-month follow-up points. This allowed us to observe outcomes consistently over time. We refer to this as the **complete-set sample**. For some analyses, the sample was limited to a *subgroup* of participants, such as for job quality outcomes measured only among employed participants. In those cases, we included all respondents with available data at the time, regardless of whether they completed every survey.

It is important to understand who is represented in survey data. We examined survey respondents' socio-demographic characteristics to assess whether the sample remained broadly comparable across program and comparison groups. This comparison is presented in **Appendix C**.[8]

4.5.2. Estimation method

For some outcomes, including employment, full-time employment, earnings, and social assistance receipt, baseline data were collected at application. For these, we used a **difference-in-differences** approach to estimate program effects. This compares how outcomes changed from baseline for the program group relative to how they changed for the comparison group. For outcomes where comparable baseline data were unavailable, we estimated differences between program and comparison group outcomes at each timepoint using **regression modelling**.

To account for differences between groups and improve the precision of our estimates, our analyses controlled for education, gender, newcomer status, and province. For outcomes measured at baseline and follow-up, our analyses also controlled for **individual-level fixed effects**, which account for each participant's baseline score and allow us to compare outcome changes over time.

Because JITA and JDA analyses have relatively limited sample sizes, some analyses may have insufficient statistical power to detect effects with conventional levels of confidence. Therefore, we highlight some estimates that do not meet conventional thresholds for statistical significance but may point to meaningful patterns of program effects. For these, we include caveats associated with our level of statistical uncertainty. We report direct measures of our uncertainty through p-values and confidence intervals. Related limitations are discussed further in **section 4.8**.

8 Excluding from estimation all but complete-set survey responders appears to induce some imbalance in the analysis sample. The difference-in-difference structure we use to estimate effects accounts for differences in baseline outcome levels, but it follows from the existence of the induced imbalance that our findings depend on a weak form of the parallel trends assumption. Specifically, for the results of our complete-set analysis to align with those from a pure random assignment, it must be true that the relationship between complete-set membership and pre-post change in outcomes (trends) is not modified by treatment assignment.

4.6. Cost-benefit analysis method

A cost-benefit analysis compares the cost of delivering a program with the financial benefits it may produce. Our analysis estimates the potential longer-term value of JITA and JDA using this report's evaluation results.

We estimate each program's impact—the difference in outcomes between program group participants and comparison group members after accounting for differences between them—after 12 months. Impact estimates are uncertain, so an observed difference may reflect an effect caused by a program or it may be due to chance.

This analysis does not measure benefits that have already occurred over 10 years. Instead, it asks: if the estimated earnings impact at 12 months was caused by JITA or JDA, and if it continued beyond the study period, what costs and financial benefits could result over the following 10 years?

Our primary measure of value for money is **net social benefit (NSB)**, **normalized per participant (NSBP)** and **per dollar of direct fiscal cost (NSBD)**. In addition to global NSB, we also consider a variation we call **net fiscal benefit (NFB)**, which counts only the value of benefits that accrue to the government's balance sheet.

- The **NSB** tells us how many dollars of net benefit each program generated: the total benefits experienced by participants minus the combined direct and indirect public costs to deliver the program, adjusted to account for the marginal cost of taxation.[xii,xiii]
- **NSBP** divides the total NSB by the number of participants to produce a measure that is comparable between JITA, JDA, and similar programs.
- **NSBD** divides the total NSB by the direct fiscal cost of delivering JITA and JDA to produce a measure that is comparable across any program, regardless of scale, intensity, or target population.
- **NFB** is calculated in the same way as NSB except that it omits the value of benefits to participants. Like NSB, NFB also adjusts for the marginal cost of taxation, so it still counts benefits in terms of dollars of value to society. As with NSB, we present NFB normalized by participant (NFBP) and by dollar value of direct costs (NFBD).

Because the evaluation followed participants for only 12 months, we do not know whether the estimated earnings impact would continue, become smaller, or grow over time. We tested all three possibilities by modelling three scenarios:

- **Consistent-effect scenario.** The estimated earnings impact remains the same for 10 years.
- **Decreasing-effect scenario.** The estimated earnings impact gradually falls by 70% by year 10. In other words, 30% of the first-year effect remains in year 10.
- **Increasing-effect scenario.** The estimated earnings impact gradually grows by 70% by year 10. In other words, the effect in year 10 is 1.7 times the first-year effect.

These scenarios are not predictions. They allow us to see how the results would change under different assumptions after the evaluation ends.

When calculating net benefits, we consider the **present value** of the projected costs and benefits. Present value expresses future amounts in today's dollars, recognizing that a dollar received in the

future is worth less than a dollar received today. We used a **7% annual discount rate**, following guidance from Canada's Treasury Board Secretariat. Finally, we compared the value of the projected benefits with the cost of delivering JITA and JDA.

Our assumptions, sensitivity analyses, and detailed approach to calculating measures of net benefit are presented in **Appendix D**.

4.7. Data sources and sample sizes

Table 6 summarizes the data sources and sample sizes used for this report.

Table 6 | Data sources and sample sizes

Data sources	Collection dates	JDA program	JDA comparison	JITA program	JITA comparison	Totals
Administrative data/research consent: Administrative data were available for applicants who consented to participate in the research and were randomized. Collected socio-demographic data, program enrolment, and completion.	Feb. 2022 –Aug. 2024	64% (1,012/1,580)	59% (224/377)	61% (2,055/3,390)	63% (598/953)	62% (3,889/6,300)
Exit survey: Captured employment outcomes in *all groups* and participant satisfaction in the *program groups only.*	Sept. 2022 –Aug. 2024	62% (629/1,012)	42% (93/224)	59% (1,205/2,055)	42% (254/598)	56% (2,181/3,889)
Six-month follow-up survey: Captured participant outcomes; administered six months post-training.	March 2023 –Feb. 2025	54% (546/1,012)	42% (95/224)	53% (1,086/2,055)	43% (257/598)	51% (1,984/3,889)
Twelve-month follow-up survey: Captured participant outcomes; administered 12 months post-training.	Sept. 2023 –Aug. 2025	58% (590/1,012)	43% (96/224)	56% (1,146/2,055)	44% (265/598)	54% (2,097/3,889)
Participant interviews: Captured participant experiences, including program strengths, areas for improvement, and reasons for leaving (where applicable).	July 2022 –Jan. 2024	31 participants in NPower Canada's programming (JITA, JDA, and other programming) were interviewed on their experiences.				

4.8. Data limitations

Findings in this report should be interpreted within the context of the following limitations:

- **Priority group exemptions.** As noted, some applicants were exempted from randomization, offered guaranteed access to JITA or JDA, and therefore not included in the impact analysis. The randomized and exempted groups differed in their eligibility criteria and several baseline characteristics.[9] Some of these differences suggest that exempted participants may have faced greater barriers. We therefore cannot assume that the impact findings apply to exempted participants.
- **Survey consent and attrition.** Overall, 62% of NPower Canada applicants during the RCT consented to participate in the research. All survey response rates were lower: across the exit, six-month and 12-month surveys, combined response rates ranged from 53% to 62% among program group participants and from 42% to 44% among comparison group members. As a result, findings based on survey data may not be generalizable to all applicants or participants offered a place in JITA or JDA. Survey attrition will be mitigated in future analysis by examining outcomes for consenting participants through Statistics Canada administrative data linkage.
- **RCT period.** Findings reflect applicants randomized between February 2022 and May 2024, with program delivery and administrative data collection continuing through August 2024. This was a period of change for NPower Canada and the broader economy, including COVID-19-related changes in program delivery that persisted during the RCT, funding requirements and opportunities, demand for ICT talent, and overall labour market conditions. As a result, the RCT period may not fully reflect business-as-usual delivery for NPower Canada.
- **Follow-up timeframe.** Surveys followed participants up to 12 months after participation. Some program effects may take longer than 12 months to appear, particularly those related to earnings growth, career progression, job stability, or movement into higher-quality digital and digitally enabled roles. Future analyses will include longer-term, more comprehensive employment and earnings data through Statistics Canada administrative data linkage.
- **Sample size.** Analyzing JITA and JDA separately was important because they serve different groups and prepare participants for different roles. However, splitting the sample reduced the number of participants available for analysis, limiting our ability to detect effects with conventional levels of statistical confidence. Some real program effects may go undetected, and some observed differences may reflect chance. The limited sample size also meant that we could not reliably examine whether impacts differed across demographic groups. As described in section 4.5., we report the size and direction of estimates alongside p-values and confidence intervals and identify where results show promising but inconclusive patterns. As above, subgroup analyses may be possible using Statistics Canada administrative data linkage.

9 The most prominent differences are eligibility criteria for membership (i.e., social assistance receipt), educational attainment, LGBTQ+ identification, Indigenous identity, disability, employment at baseline, and immigration histories.

- **Limitations for IT-related and digitally enabled employment findings.** To assess whether participants held IT-related or digitally enabled roles, we relied on job information collected through the RCT surveys, including NAICS and NOC codes selected by participants and job titles when they could not identify a suitable code. These data allowed us to classify roles using participants' reported occupations and sectors, but they did not provide the same level of detail used in NPower Canada's outcomes reporting, which includes job functions and descriptions, employer information, departments, sector context, seniority, career progression and regional labour market conditions. As a result, the RCT data may not fully capture whether a role aligned with NPower Canada's target roles or used the digital skills taught in JITA or JDA. This limitation may be especially relevant for administrative, social services and other roles outside traditional IT classifications, where digital tools or data may be important to job performance but not apparent from an occupation code or job title.
- **Limitations to the cost-benefit analysis.** The cost-benefit analysis relies on program impacts measured 12 months after participation and assumptions about how those effects may change over time. The estimated earnings impact for JDA has a wide confidence interval, so the true effect could be considerably lower or higher than the estimate used in the model. The estimated earnings impact for JITA is also highly uncertain, and JITA's theory of changes suggests that it may take longer than 12 months for JITA to produce earnings effects, limiting the explanatory power of our model. Earnings were measured at a point in time and converted into estimated annual earnings; taxes were estimated using assumed rates rather than participants' actual tax records. The analysis also excludes some possible costs and benefits, including longer-term changes in transfer payments, the costs of other training or employment supports used by comparison group participants, and possible benefits to employers from greater productivity or better job matches. Longer-term linked administrative data will allow us to update the analysis using more complete measures of earnings, taxes, and program impacts.



5. Findings

5.1. Program reach

NPower Canada reached its target audience.

Table 7 presents the demographic profiles of consenting JITA and JDA participants in the randomized program groups.

		% of JDA participants (N=1,012 unless otherwise noted)	**% of JITA participants** (N=2,055 unless otherwise noted)	**% of all participants** (N=3,067, unless otherwise noted)
Level of education	High school diploma	100% (N=988)	100% (N=2,018)	100% (N=3,006)
	Any PSE credential	96% (N=988)	78% (N=2,018)	84% (N=3,006)
Age	Under 30	49%	45%	46%
	30–50	49%	52%	51%
	Over 50	2%	3%	3%
Employment	Employed	43%	37%	39%
	Employed full-time	18% (N=964)	14% (N=1,978)	16% (N=2,942)
	Annual earnings >$25,000	77% (N=962)	80% (N=1,970)	79% (N=2,932)
	Unemployed	57%	63%	61%
	Receiving EI or social assistance	13% (N=1,011)	21% (N=2,037)	18% (N=3,048)

		% of JDA participants (N=1,012 unless otherwise noted)	% of JITA participants (N=2,055 unless otherwise noted)	% of all participants (N=3,067, unless otherwise noted)
Immigration status	Born in Canada	17%	34%	28%
	Immigrant	83%	66%	72%
	Newcomer (<five years in Canada)	72%	56% (N=2,054)	61% (N=3,066)
Equity-deserving groups	Any	97%	94%	95%
	Black	19%	34%	29%
	Indigenous Peoples	N/A	N/A	N/A
	BIPOC	96%	93%	94%
	Persons with disabilities	2% (N=1,010)	5% (N=2,054)	4% (N=3,064)
	2SGBTQ+	4% (N=942)	7% (N=1,878)	6% (N=2,820)
	Woman+	53%	57%	56%

Source. NPower Canada administrative data

Note. Some participants did not respond to every question; as a result, percentages are calculated using a smaller N, as indicated in the table. Indigenous applicants were not randomized because NPower Canada offered them guaranteed access to the program. They are therefore not represented in the randomized groups summarized in this table.

NPower Canada reached people facing barriers to stable employment.

At baseline, **61%** of participants were unemployed, only **16%** were employed full-time, and **79%** reported annual earnings below $25,000. **Eighteen percent** were receiving EI or social assistance. At the same time, **84%** held a postsecondary credential.[10] Taken together, these findings show that NPower Canada reached people who often had formal qualifications but limited access to well-paying, full-time work.

NPower Canada reached participants from groups underrepresented in IT and digital employment.

Almost all participants (**95%**) identified as belonging to at least one equity-deserving group: **94%** identified as Black or another racialized group, and **56%** identified as woman+. Immigrants made up **72%** of participants, and **61%** were newcomers who had arrived in Canada within the previous five years.

10 NPower Canada notes that many of these credentials were obtained outside Canada. The evaluation did not collect information on where participants obtained their credentials.

NPower Canada reached both younger and older adults.

Participants included both younger and older adults. **Forty-six percent** were under 30, **51%** were aged 30 to 50, and **3%** were over 50. This reflects NPower Canada's expansion beyond its original focus on young adults.

JITA and JDA reached distinct participant populations.

JDA was designed as a more advanced pathway for applicants with previous education, technical knowledge, or work experience, while JITA provided more foundational training. Consistent with the programs' different target populations, JDA participants were more likely to hold a PSE credential (**96%** compared with **78%** in JITA) and be employed at baseline (**43%** compared with **37%**). JDA participants were also more likely to be immigrants (**83%** compared with **66%**) and less likely to identify as Black (**19%** compared with **34%**) or to receive EI or social assistance (**13%** compared with **21%**).

These baseline differences are important context for interpreting the impact findings that follow. Each program was evaluated against its own comparison group. Differences in the impacts of JDA and JITA should therefore not be interpreted as a direct comparison of the two programs' effectiveness.



"NPower Canada reached people facing barriers to employment and groups underrepresented in the digital economy."

5.2. Program reach

This section examines program completion, participant satisfaction, and participants' views of program strengths and areas for improvement.

Program completion was high among those who enrolled.

As shown in **Table 8**, **68%** of applicants who were offered a seat accepted and enrolled. Enrolment was slightly higher for JDA than JITA (**72%** versus **67%**). Among those who enrolled, **87%** completed their program; completion rates were similar in both programs.

Table 8 | Program completion rates

Program	Offered enrolment	Enrolled	**Completed** (among enrolled)
JDA	1,580	72% (1,132)	**87%** (990)
JITA	3,390	67% (2,272)	**86%** (1,957)
All participants	4,970	68% (3,404)	**87%** (2,947)

Source. NPower Canada administrative data

Note. This table includes all applicants randomly assigned to the program groups and offered enrolment. Table 7 is limited to program group members who also consented to participate in the research. As a result, the sample sizes differ.

Interviewed participants who enrolled but did not complete (N=8) identified four reasons for leaving:

- **Employment.** Some left because they found work in their desired field.
- **Scheduling conflicts.** Some could not balance the program with part-time employment.
- **Other training opportunities.** Some left to pursue training outside NPower Canada.
- **Program fit.** A few felt that the curriculum, teaching approach, and/or intended career pathways did not align with their needs, particularly among those with more experience.

These interviews suggest that not all non-completion reflected disengagement or a negative program experience. Some participants left after finding employment or deciding to pursue other training. However, because only eight participants who did not complete a program were interviewed, the findings do not show how common each reason was.

Participants were satisfied with the programs and found them useful.

We assessed satisfaction using five measures: overall satisfaction, likelihood of recommending the programs, and perceived usefulness for developing digital, professional, and career-related skills.

As shown in **Table 9** (on the next page), **78%** of participants were satisfied with their programs and **73%** had already recommended or were likely to recommend their program. Between **84%** and **87%** found them useful for skill development. Results were similar for JDA and JITA participants.

Table 9 | Satisfaction by program

Program	JDA (N=531)	JITA (N=984 unless otherwise noted)	All participants (N=1,515 unless otherwise noted)
Satisfied overall	79%	77% (N=983)	78% (N=1,514)
Likely to recommend or already recommended the program	75%	73%	73%
Found it useful for improving technical/digital skills	89%	87%	87%
Found it useful for improving professional skills	87%	86%	86%
Found its career-related content useful	85%	84%	84%

Source. Program exit survey

Interviewed participants identified strengths in program staff, structure, peer learning, and training.

Among the 31 participants interviewed, many found that completing their program gave them a sense of pride and accomplishment. Participants reported greater confidence in their teamwork, communication, and technical skills, as well as expanded professional networks. They identified the following strengths:

- **NPower Canada staff.** Participants appreciated that instructors were passionate, responsive, and committed to their success.
- **Program format and structure.** Some participants said online delivery helped them balance training with other responsibilities. Participants valued the regular schedule and the mix of independent and group work, which they felt reflected a real workplace environment.
- **Group work.** Participants valued opportunities to connect with peers, complete course material together, and build personal and professional networks.
- **Coursera assessments.** Participants generally felt that Coursera assessments aligned with the course material. They valued regular assessments, the ability to track their progress, and opportunities to retake tests.
- **Professional skills training.** Participants found industry and alumni speakers, interview practice, and résumé and cover letter workshops helpful.

"Program completion rates were high, and participants found the programs valuable."



Some interviewed participants identified orientation and the pace of technical training as areas for improvement.

Two recurring themes emerged from interviews. Notably, these describe the experiences of the 31 individuals interviewed and should not be interpreted as representative of all JITA and JDA participants:

- **Onboarding.** Some participants, particularly those in earlier cohorts, described onboarding as fast-paced and confusing. Some wanted more guidance on day-to-day program logistics, such as accessing lectures and submitting assignments. NPower Canada subsequently changed its early onboarding from a bootcamp to an orientation in response to participant feedback. The revised approach was intended to provide a more welcoming, inclusive, and lower-pressure introduction to the program.
- **Pace of technical training.** Participants generally valued the technical content, but a recurring concern was that the training moved too quickly for them to fully absorb the material. Some wanted more practical, hands-on learning through labs, practice assignments, industry visits, or larger capstone projects.

5.3. Program effectiveness

This section presents the estimated impacts of JITA and JDA on the three core outcome areas in NPower Canada's theory of change:

- **employment**, including any employment, full-time employment, IT-related employment, and digitally enabled employment;
- **earnings**; and
- **job quality**, including job benefits, temporary/fixed-term contract employment, seasonal employment, casual employment, shift work, job satisfaction, perceived opportunities for career advancement, and perceptions of meaningful employment.

For IT-related employment, digitally enabled employment, and earnings, we analyze outcomes for all program and comparison group members *as well as* for *employed* program and comparison group members only. We analyze job quality outcomes for employed program and comparison group members only.

For all outcomes, we use regression analysis to compare the program and comparison groups at program exit, six months, and 12 months. Because applicants were randomly assigned to these groups, differences between them provide estimates of the programs' impacts. In other words, the analysis shows the difference JITA or JDA made over and above any changes also experienced by the comparison group. **Box 1** (on the next page) explains the effect estimates, standard errors, p-values, and confidence intervals presented in this section.

"Both programs showed potential positive effects on employment and full-time employment."



Box 1 | Regression model outputs

The **effect estimate** shows how much the outcome changed due to participation in JDA or JITA programs.	**Standard error** shows how much the results vary. Larger standard errors mean the effect must be larger for us to trust the result.	**P-value** indicates how compatible the observed result is with the possibility that the program has no effect on outcomes. Smaller values provide stronger evidence against there being no effect.	**Confidence intervals** show the range where the true result likely falls. Narrow ranges indicate more certainty; wide ranges suggest caution.

As noted in **section 4. Methodology**, analyzing JITA and JDA separately reduced the sample size available for each analysis. This made it more difficult to detect effects with conventional levels of statistical confidence. We therefore also highlight some estimates that suggest a meaningful difference but are not statistically significant. We refer to these as potential effects. Potential effects provide some evidence of a possible program effect, but the evidence is not conclusive. We present p-values and confidence intervals to show the level of uncertainty around each estimate.

5.3.1. Summary of impact findings

The following two sections summarize findings across all outcomes for JITA and JDA. The remainder of section 5.3 presents detailed results for each outcome, including **effect estimates and trends over time**.

5.3.1.1. Summary of impact findings for JITA

Table 10 (on the next page) summarizes the estimated effects of JITA at program exit, six months, and 12 months. The shading represents the strength of the evidence. **Green** indicates a statistically significant effect, **purple** indicates a potential effect (but did not meet conventional thresholds for statistical significance), and **grey** indicates no clear evidence of an effect. Arrows represent whether the program had an increasing or decreasing effect on the outcome. For some job quality outcomes, like seasonal or casual employment, downward arrows (decreases) represent improvements.

"Overall, the findings suggest that JITA may provide an initial foothold in IT-related work."



Table 10 | JITA effects by outcome, period, and level of confidence

	Exit	Six months	12 months
Employment			
Any employment		↑	
Full-time		↑	↑
IT-related		↑	↑
IT-related (among employed only)	↑	↑	↑
Digitally enabled			
Digitally enabled (among employed only)	↑		
Earnings			
Earnings			
Earnings (among employed only)	↓	↓	
Job quality (employed only)			
Job benefits	↑	↑	
Temporary employment/fixed-term contract			
Seasonal employment		↑	
Casual employment			↓
Shift work			
Job satisfaction	↑		
Perceived opportunities for advancement		↑	
Perceived meaningful work			

Source. NPower Canada administrative data and exit, six-month, and 12-month follow-up surveys

JITA increased IT-related employment and showed potential positive effects on employment and full-time employment at six months.

JITA increased IT-related employment at six months and had a potential positive effect at 12 months. Among employed participants, it had potential positive effects on IT-related employment at all three timepoints. JITA also had potential positive effects on overall employment at six months and full-time employment at six and 12 months.

Among employed participants, JITA also had a potential positive effect on digitally enabled employment at program exit. Effects were clearer for IT-related employment than for digitally enabled employment. This may reflect the difference between the two measures: IT-related employment captures traditional IT roles, while digitally enabled employment also includes roles outside IT in which digital tools or skills are important. Comparison group participants may also have entered these other types of digitally enabled roles, reducing the difference between the groups.

There was no evidence that JITA affected earnings overall. Employed participants had potentially lower earnings at exit and six months.

There was no evidence that JITA affected earnings among all participants at any follow-up point. Among employed participants, earnings were somewhat lower at program exit and six months, with no differences observed by 12 months.

One possible explanation is that participants may have entered junior IT roles that paid less initially but provided benefits, relevant experience, and a foothold in the IT sector. These roles may offer greater room for longer-term career and earnings growth. JITA's potential positive effects on access to benefits at exit and six months and its positive effect on perceived opportunities for advancement at six months are consistent with this explanation. However, the available data cannot confirm that participants traded short-term earnings for these other job features. Longer-term evidence is needed to determine whether earnings increased as participants gained experience.

JITA increased perceived opportunities for advancement at six months and showed some potential effects on job quality.

JITA increased perceived opportunities for advancement at six months. It had potential positive effects on access to job benefits at exit and six months and on job satisfaction at exit. It potentially reduced casual employment at 12 months ($p = 0.058$). It also potentially increased seasonal employment at six months.

JITA increased perceived opportunities for advancement at six months and showed some potential effects on job quality.

At six months, JITA participants were more likely to have IT-related employment and to perceive opportunities for advancement. They were also potentially more likely to be employed, work full time, and have access to job benefits. Some potential positive effects were also apparent at 12 months: JITA participants were potentially more likely to work full time and in IT-related roles, while employed participants were potentially less likely to work casually.

The potential increase in seasonal employment at six months did not fit this broader pattern. It was an isolated finding that did not persist at 12 months, and the available data do not explain it. Overall, the findings suggest that JITA may provide an initial foothold in IT-related work. However, the 12-month follow-up period may be too short to determine whether this early movement leads to longer-term career progression and earnings growth.

5.3.1.2. Summary of impact findings for JDA

Table 11 (on the next page) summarizes the estimated effects of JDA at program exit, six months, and 12 months. The shading represents the strength of the evidence. **Green** indicates a statistically significant effect, **blue** indicates a potential effect (but did not meet conventional thresholds for statistical significance), and **grey** indicates no clear evidence of an effect. Arrows represent whether the program had an increasing or decreasing effect on the outcome. For some job quality outcomes, like seasonal or casual employment, downward arrows (decreases) represent improvements.



"JDA showed a broad range of potential effects at six and 12 months."

Table 11 | JDA effects by outcome, time period, and level of confidence

	Exit	Six months	12 months
Employment			
Any employment	↑	↑	↑
Full-time			↑
IT-related			
IT-related (among employed only)		↑	↑
Digitally enabled			
Digitally enabled (among employed only)	↑	↑	↑
Earnings			
Earnings		↑	↑
Earnings (among employed only)		↑	
Job quality (employed only)			
Job benefits			↑
Temporary employment/fixed-term contract			↑
Seasonal employment			
Casual employment			
Shift work			
Job satisfaction			
Perceived opportunities for advancement			↑
Perceived meaningful work	↓		

Source. NPower Canada administrative data and exit, six-month, and 12-month follow-up surveys

JDA showed potential positive effects on employment and, among employed participants, on IT-related and digitally enabled employment.

JDA had potential positive effects on employment at program exit, six months, and 12 months and on full-time employment at 12 months. While there was no evidence that JDA affected IT-related or digitally enabled employment among all participants, it had potential positive effects on IT-related employment for *employed* participants at six and 12 months and on digitally enabled employment at all three follow-up points.

JDA applicants entered the RCT with relevant skills, education, and work experience. This may help explain why IT-related employment was high among employed participants at exit: 40% of JDA and 39% of comparison group participants held IT-related roles. By 12 months, the rate increased to 47% among JDA and declined to 32% among comparison group participants.

The potential effects on digitally enabled employment align with JDA's focus on data, reporting, and business analysis roles. These roles can be located within business or operational teams across many industries rather than within traditional IT departments. The digitally enabled employment measure captures these roles even when they are not classified as traditional IT employment. This may help explain why JDA showed potential effects on digitally enabled employment among employed participants at all three survey points.

JDA had potential positive effects on earnings at six and 12 months.

JDA had potential positive effects on earnings among all participants at six and 12 months. This measure reflects both whether participants were employed and how much employed participants earned. JDA's potential positive effects on employment may therefore explain part of the overall earnings findings. Among employed participants, JDA also had a potential positive effect on earnings at six months. This suggests that higher pay, more hours, or more consistent work may also have contributed at that point. One possible explanation is that participants combined their previous education and work experience with new data and analytical skills to access work with higher earnings.

JDA's effects on job quality were mixed.

JDA reduced perceived opportunities for advancement at program exit, but this effect did not persist. One possible explanation is that the program changed how participants assessed their existing jobs by exposing them to other career paths. Available data do not show whether participants remained in their previous jobs or why their perceptions changed.

At 12 months, JDA increased job satisfaction and had a potential positive effect on access to job benefits. It also increased temporary or fixed-term employment. This may reflect participants entering new roles that were initially offered on a temporary or fixed-term basis. However, these positions may also provide less employment stability, and the available data do not show whether they led to permanent work. The types of roles available may also have reflected labour market uncertainty at the time, although both groups faced these conditions, so this context alone does not explain the difference between them.

JDA showed a broad range of potential effects at six and 12 months.

At program exit, JDA had potential positive effects on employment and digitally enabled employment among employed participants. By six months, potential effects had emerged on IT-related employment among employed participants and on earnings among both all participants and employed participants.

At 12 months, the potential effects on IT-related employment among employed participants and overall earnings persisted. The findings include potential positive effects on full-time employment and access to benefits and a statistically significant increase in job satisfaction. The employed-only earnings effect did not persist.

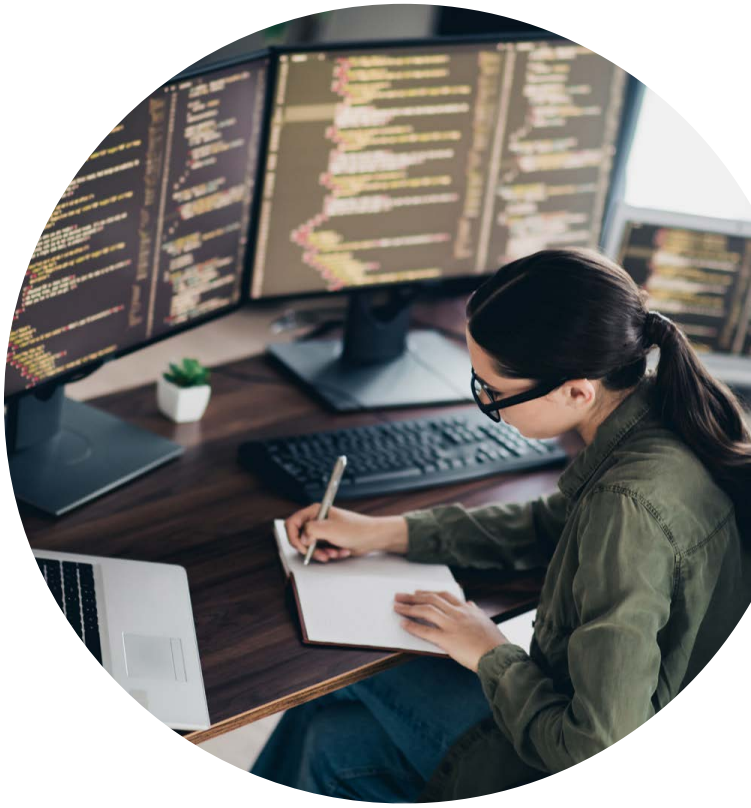
Together, this pattern suggests that some JDA effects may have taken time to emerge. The increase in temporary or fixed-term employment at 12 months may reflect movement into new roles that began as contracts. Most estimates did not meet conventional thresholds for statistical significance, so the pattern should be interpreted with caution.

"JDA showed a clearer pattern of potential earnings gains."

5.3.2. Detailed findings by outcome

In the remainder of this section, we present detailed findings by outcome for JITA and JDA. For each outcome, we first present the percentage of program and comparison group participants who experienced the outcome at each time point. We present a visual showing how these results changed over time.

We then present regression-adjusted estimates of program effects, controlling for participants' baseline characteristics. The percentages and trends show what actually happened in each group, while the regression-adjusted estimates allow us to assess program effects. For each estimate, we report the standard error, p-value and 95% confidence interval. **Box 1** explains what these measures mean and how they should be interpreted.



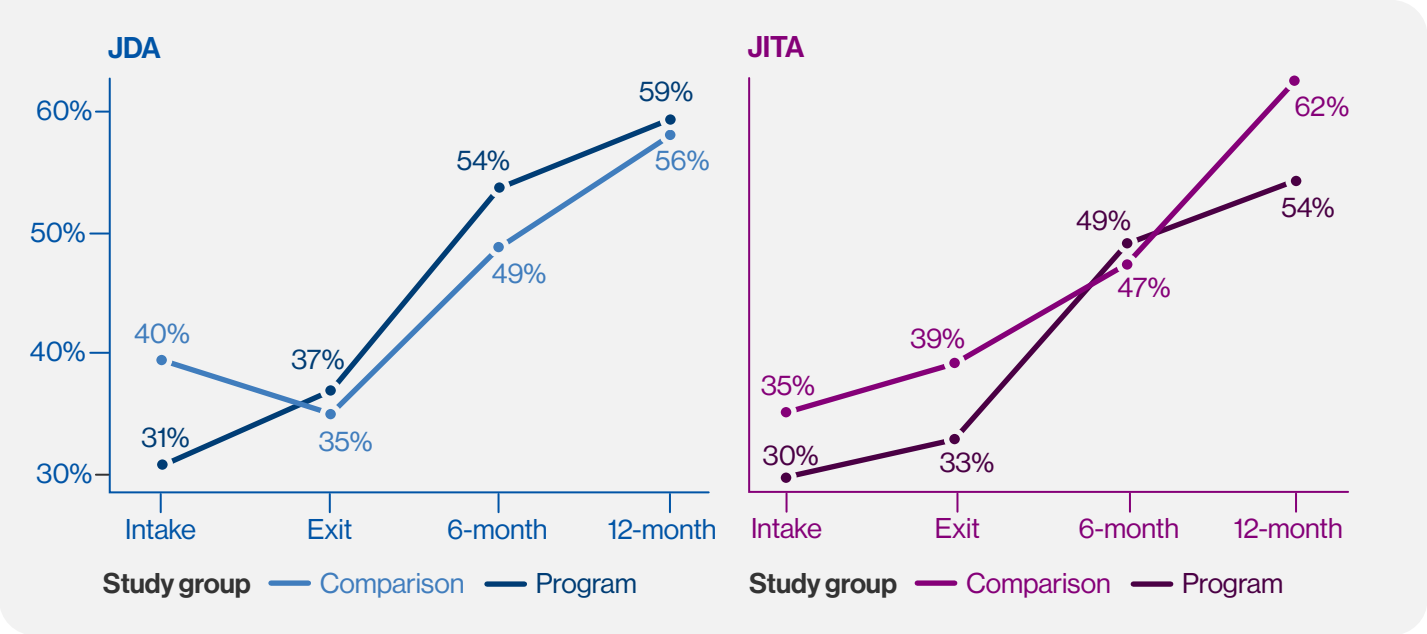
5.3.2.1. Employment

Employment rates by program

Figure 5 shows the percentage of participants employed[11] in program and comparison groups at each timepoint. As shown, employment increased from baseline to 12 months across all groups:

- Among JDA participants, it increased from 31% to **59%** (**+28 percentage points**).
- Among the JDA comparison group, it increased from **40%** to **58%** (**+18 percentage points**).
- Among JITA participants, it increased from **30%** to **54%** (**+24 percentage points**).
- Among the JITA comparison group, it increased from **35%** to **62**% (**+27 percentage points**).

Figure 5 | Employment rates by program for JDA and JITA participants



Source. NPower Canada administrative data and exit, six-month, and 12-month follow-up surveys (complete-set sample)

Regression-adjusted effect estimates for employment

Table 12 (on the next page) shows the change in employment rates from baseline to each follow-up point and presents the regression-adjusted effect estimates. Each estimate represents the percentage-point difference between the program and comparison groups after adjusting for site and selected participant characteristics.[12] **Table 12** (on the next page) also presents the standard error, p-value, and 95% confidence interval associated with each estimate.

11 At program exit, six months, and 12 months, participants were classified as employed if they reported working for income during the past week, either as an employee or through self-employment. Baseline employment status was drawn from NPower Canada administrative data.

12 Effect estimate regressions control for site, participant gender, and participant level of education.

- For **JDA**, emploment increased more among program than among comparison group participants at all three follow-up points. The estimated difference was **10.9 percentage points** at exit (p = 0.223), **13.7 percentage points** at six months (p = 0.129) and **9.9 percentage points** at 12 months (p = 0.270). These consistent positive estimates are treated as potential positive effects, although they did not meet conventional thresholds for statistical significance and should be interpreted with caution.
- For **JITA**, the estimated changes were similar for program and comparison group participants at program exit. At six months, employment increased by an estimated **6.5 percentage points** more among JITA participants (p = 0.252), representing a potential positive effect. At 12 months, the estimated change was larger among comparison group participants. There was no clear evidence of a JITA effect at exit or 12 months.

Table 12 | Regression results for employment

Outcome	Change from baseline: Program group (PP)	Change from baseline: Comparison group (PP)	Difference (program to comparison)	Effect estimate (regression -adjusted)	Standard error	P-value	Confidence interval (95% CI)
JDA Stream							
Exit	6	−5	11	0.109	0.090	0.223	−0.067–0.286
Six months	23	9	14	0.137	0.090	0.129	−0.040–0.313
12 months	28	18	10	0.099	0.090	0.270	−0.077–0.275
JITA Stream							
Exit	3	4	−1	−0.016	0.057	0.782	−0.128–0.096
Six months	19	12	7	0.065	0.057	0.252	−0.047–0.177
12 months	24	27	−3	−0.047	0.059	0.428	−0.162–0.068

Source. Participant baseline and program exit surveys

p ≤ 0.3 | p ≤ 0.2 | p ≤ 0.05 | p ≤ 0.01 | p ≤ 0.001

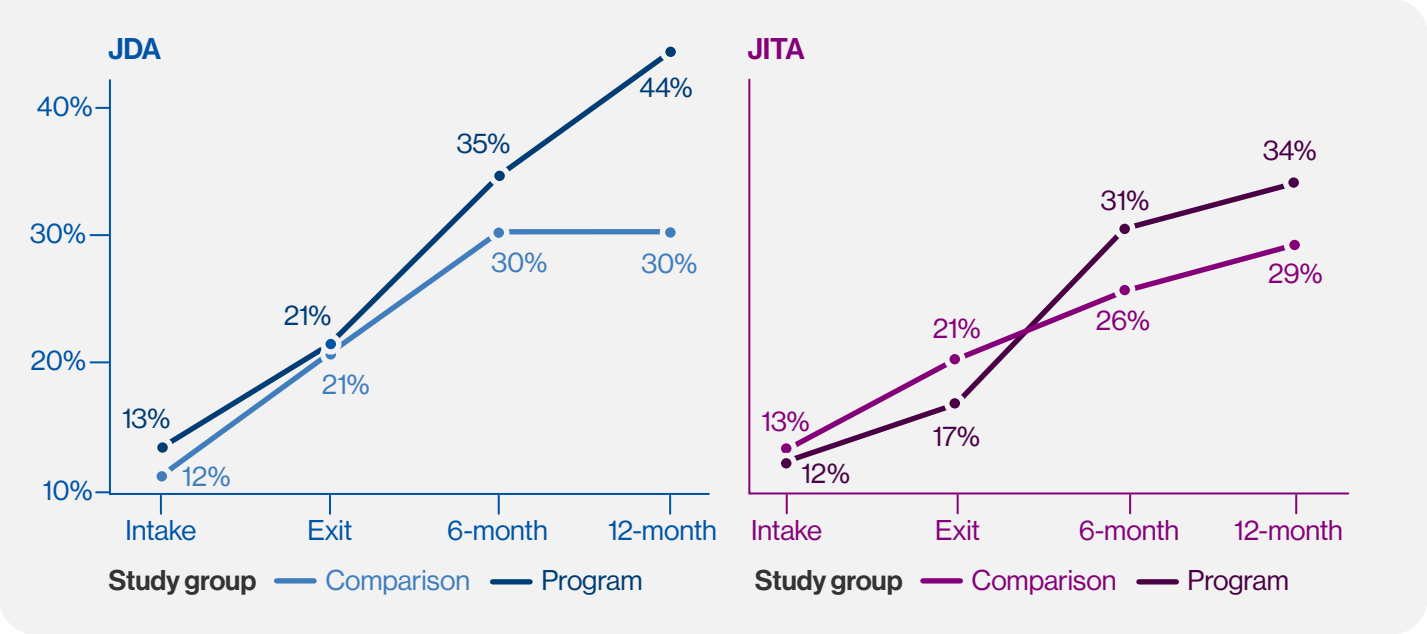
5.3.2.2. Full-time employment

Full-time employment rates by program

Figure 6 shows the percentage of participants in full-time employment[13] in the program and comparison groups at each timepoint. As shown, full-time employment increased from baseline to 12 months across all groups:

- Among JDA participants, it increased from **13%** to **44%** (**+31 percentage points**).
- Among the JDA comparison group, it increased from **12%** to **34%** (**+22 percentage points**).
- Among JITA participants, it increased from **12%** to **34%** (**+22 percentage points**).
- Among the JITA comparison group, it increased from **13%** to **29%** (**+16 percentage points**).

Figure 6 | Full-time employment rates by program



Source. NPower Canada administrative data and exit, six-month, and 12-month follow-up surveys (complete-set sample)

Regression-adjusted effect estimates for full-time employment

Table 13 presents the regression-adjusted effect estimates for full-time employment.

- For **JDA**, full-time employment increased by an estimated **12.5 percentage points** more among JDA participants than among comparison group participants at 12 months (p = 0.132). This represents a potential positive effect. There was no evidence of an effect at program exit or six months.
- For **JITA**, full-time employment increased by an estimated **5.8 percentage points** more among JITA participants at six months (p = 0.238) and **5.9 percentage points** more at 12 months (p = 0.231). These estimates represent potential positive effects. There was no evidence of an effect at program exit.
- None of the estimates met conventional thresholds for statistical significance, so the potential effects should be interpreted cautiously.

13 We assessed whether participants were engaged in full-time employment, defined as working 35 hours or more per week.

Table 13 | Regression results for employment

Outcome	Change from baseline: Program group (PP)	Change from baseline: Comparison group (PP)	Difference (program to comparison)	Effect estimate (regression -adjusted)	Standard error	P-value	Confidence interval (95% CI)
JDA stream							
Exit	8	9	−1	−0.015	0.083	0.854	−0.178–0.147
Six months	22	18	4	0.029	0.083	0.729	−0.134–0.191
12 months	31	18	13	0.125	0.083	0.132	−0.038–0.288
JITA stream							
Exit	5	8	−3	−0.023	0.049	0.633	−0.119–0.072
Six months	19	13	6	0.058	0.049	0.238	−0.038–0.154
12 months	22	16	6	0.059	0.049	0.231	−0.037–0.154

Source. Participant baseline and program exit surveys

$p \leq 0.3$ $p \leq 0.2$ $p \leq 0.05$ $p \leq 0.01$ $p \leq 0.001$

5.3.2.3. Employment in IT and digitally enabled roles

We examined in-sector employment outcomes[14] in two ways.

- First, we estimated the share of *all* program and comparison group participants who were employed in IT-related or digitally enabled roles. This measure includes any paid employment and is not limited to full-time work. It captures both whether participants became employed and whether they moved into one of these types of roles.
- Second, we examined the types of jobs held only by those participants who were employed and provided enough information for their jobs to be categorized. This narrower analysis does not capture the programs' effects on becoming employed and may be affected by selection bias because it considers a non-random sample of participants. However, it helps specifically show whether participants who found work were more likely to enter IT-related or digitally enabled roles.

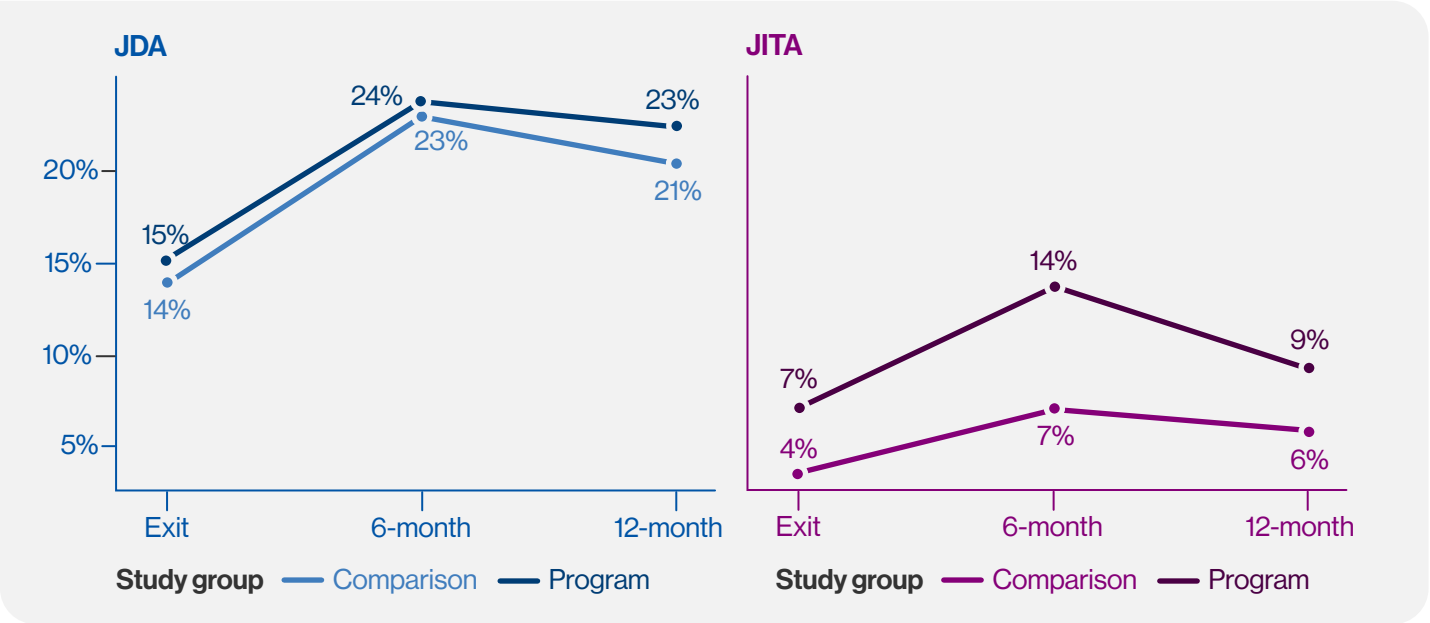
14 We examined IT-related and digitally enabled employment outcomes using two role definitions: IT-related roles, identified using participants' reported job titles and sectors of employment; and digitally enabled roles, identified based on whether the job aligned with NPower Canada's target roles and used the digital skills taught in JITA or JDA. These roles may be found across a range of sectors beyond IT. Our classifications are based on job title and sector information collected through the RCT surveys. For its own tracking and performance measurement, NPower Canada uses a broader range of employment information. It also considers whether a role aligns with the program's target job clusters or uses the skills taught in the program. This allows NPower Canada to identify digitally enabled roles that Blueprint could not classify using the more limited RCT survey data. **Box 2** (on p. 60) describes NPower Canada's approach and presents its administrative results separately.

IT-related employment rates by program

Figure 7 shows the percentage of all participants employed in an IT-related role at each time point, by program. As shown, IT-related employment increased from program exit to six months before declining at 12 months. However, rates remained higher at 12 months than at exit across all four groups:

- Among JDA participants, it increased from **15%** at exit to **23%** at 12 months (**+8 percentage points**).
- Among the JDA comparison group, it increased from **14%** to **21%** (**+7 percentage points**).
- Among JITA participants, it increased from **7%** to **9%** (**+2 percentage points**).
- Among the JITA comparison group, it increased from **4%** to **6%** (**+2 percentage points**).

Figure 7 | Rates of employment in IT by program



Source. Exit, six-month, and 12-month follow-up surveys (complete-set sample)

Regression-adjusted effect estimates for IT-related employment

Table 14 presents the regression-adjusted effect estimates for IT-related employment.

- **JITA** had a statistically significant positive effect on IT-related employment at six months. JITA participants were an estimated **6.5 percentage points** more likely than comparison group participants to be employed in an IT-related role ($p = 0.043$). At 12 months, JITA participants were an estimated **3.8 percentage points** more likely to be employed in an IT-related role ($p = 0.258$), representing a potential positive effect. There was no evidence of an effect at program exit.
- For **JDA**, the estimated differences between JDA and comparison group participants were small at all three follow-up points, ranging from **0.4 to 3.3 percentage points**. There was no evidence that JDA affected IT-related employment among all participants.

Table 14 | Regression coefficients for employment in IT

Timepoint	% in IT rol (program)	% in IT role (comparison)	Difference (program to comparison)	Effect estimate (regression -adjusted)	Standard error	P-value	Confidence interval (95% CI)
JDA stream							
Exit	15	14	1	0.012	0.068	0.858	−0.122–0.147
Six months	24	23	1	0.004	0.068	0.948	−0.130–0.139
12 months	23	21	2	0.033	0.071	0.645	−0.107–0.173
JITA stream							
Exit	7	4	3	0.035	0.032	0.273	−0.028–0.099
Six months	14	7	7	0.065	0.032	0.043	0.002–0.129
12 months	9	6	3	0.038	0.033	0.258	−0.028–0.103

Source. Participant baseline and program exit surveys

p ≤ 0.3 | p ≤ 0.2 | p ≤ 0.05 | p ≤ 0.01 | p ≤ 0.001

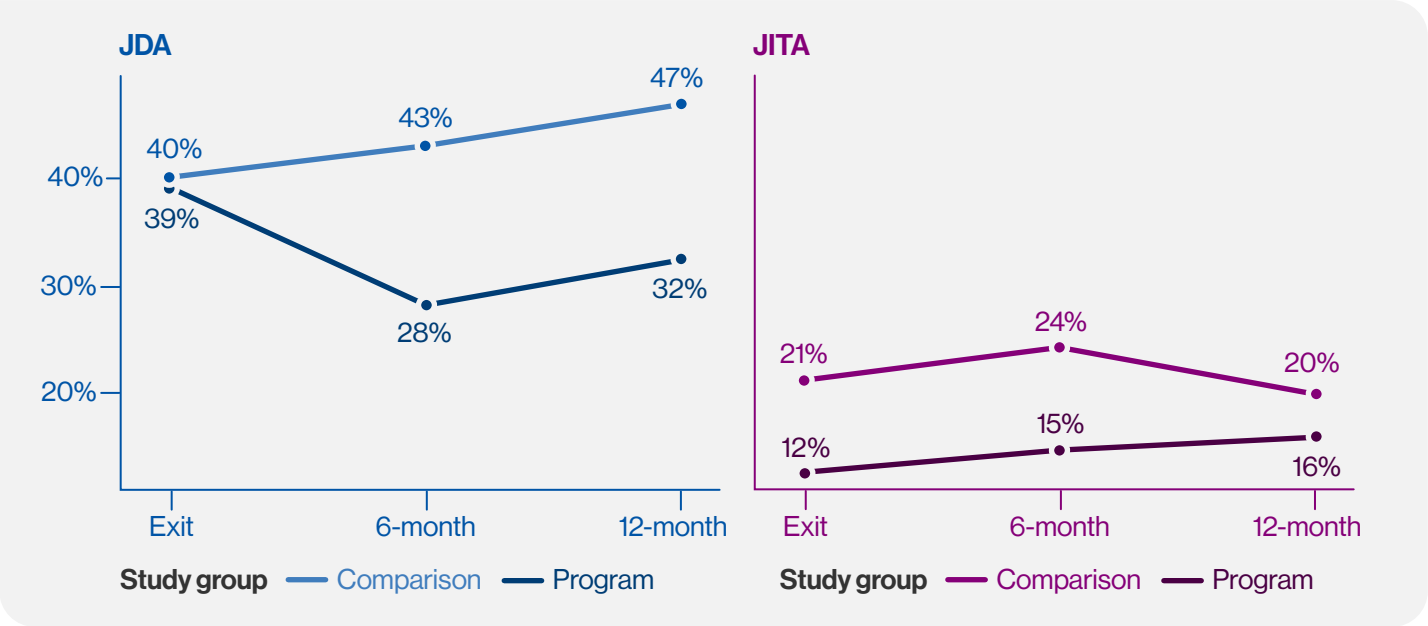
IT-related employment rates by program (among employed participants only)

Figure 8 (on the next page) shows the percentage of *employed* participants who were working in IT-related roles at exit, six months, and 12 months, by program.[15] Between program exit and 12 months:

- Among employed JDA participants, IT-related employment increased from **40%** to **47%** (**+7 percentage points**).
- Among employed participants in the JDA comparison group, it decreased from **39%** to **32%** (**−7 percentage points**).
- Among employed JITA participants, it remained relatively stable, decreasing from **21%** to **20%** (**−1 percentage point**).
- Among employed participants in the JITA comparison group, it increased from **12%** to **16%** (**+4 percentage points**).

15 Because IT-related employment was not measured at baseline, we cannot determine how these rates changed relative to participants' employment before the programs.

Figure 8 | Rates of employment in IT for employed participants (by program) whose occupations could be categorized



Source. Exit, six-month, and 12-month follow-up surveys (complete-set sample)

Regression-adjusted effect estimates for IT-related employment (among employed participants only)

Table 15 (on the next page) presents the regression-adjusted effect estimates for IT-related employment among employed participants.

- For **JDA**, employed program and comparison group participants had similar rates of IT-related employment at exit, providing no evidence of an effect. At six months, employed JDA participants were an estimated **13.3 percentage points** more likely than employed comparison group participants to hold an IT-related role (p = 0.102). At 12 months, they were an estimated **12.2 percentage points** more likely to hold an IT-related role (p = 0.148). These estimates represent potential positive effects.
- For **JITA**, employed program participants were an estimated **6.8 percentage points** more likely than employed comparison group participants to hold an IT-related role at program exit (p = 0.160), **7.2 percentage points** more likely at six months (p = 0.099) and **4.8 percentage points** more likely at 12 months (p = 0.263). These estimates represent potential positive effects at all three follow-up points.
- None of the estimates met conventional thresholds for statistical significance, so the potential effects should be interpreted cautiously.

Table 15 | Regression coefficients for employment in IT for employed JDA and JITA participants whose occupations could be categorized

Timepoint	% in IT role (program)	% in IT role (comparison)	Difference (program to comparison)	Effect estimate (regression -adjusted)	Standard error	P-value	Confidence interval (95% CI)
JDA stream							
Exit	40	39	1	0.001	0.092	0.993	−0.181–0.182
Six months	43	28	15	0.133	0.081	0.102	−0.026–0.293
12 months	47	32	15	0.122	0.084	0.148	−0.043–0.287
JITA stream							
Exit	21	12	9	0.068	0.048	0.160	−0.027–0.163
Six months	24	15	9	0.072	0.044	0.099	−0.014–0.158
12 months	20	16	4	0.048	0.042	0.263	−0.036–0.131

Source. Participant baseline and program exit surveys

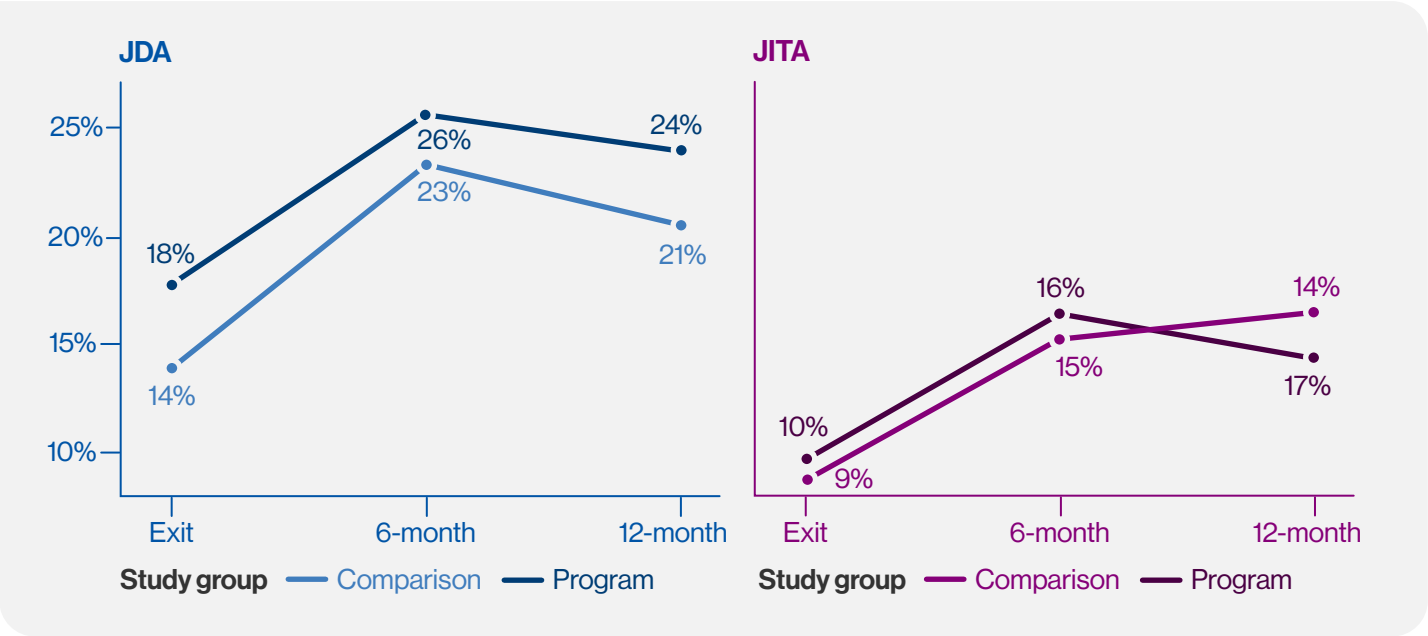
p ≤ 0.3 p ≤ 0.2 p ≤ 0.05 p ≤ 0.01 p ≤ 0.001

Digitally enabled employment rates by program

Figure 9 (on the next page) shows the percentage of all participants employed in a digitally enabled role at each time point, by program. This measure includes any paid employment and is not limited to full-time work. As shown, digitally enabled employment increased between program exit and 12 months:

- Among JDA participants, it increased from **18%** to **24%** (**+6 percentage points**).
- Among the JDA comparison group, it increased from **14%** to **21%** (**+7 percentage points**).
- Among JITA participants, it increased from **10%** to **14%** (**+4 percentage points**).
- Among the JITA comparison group, it increased from **9%** to **17%** (**+8 percentage points**).

Figure 9 | Rates of digitally enabled employment by program



Source. Exit, six-month, and 12-month follow-up surveys (complete-set sample)

Regression-adjusted effect estimates for digitally enabled employment

Table 16 presents the regression-adjusted effect estimates for digitally enabled employment.

- For **JDA**, digitally enabled employment rates were higher among JDA participants than among comparison group participants at each follow-up point. After adjusting for site and selected participant characteristics, the estimated differences ranged from **2.3 to 4.9 percentage points**. However, there was no evidence of an effect at any follow-up point.
- For **JITA**, the program and comparison groups had similar digitally enabled employment rates at program exit and six months. At 12 months, the rate was higher among comparison group participants. The regression-adjusted differences ranged from **–1.2 to 1.2 percentage points**, providing no evidence of an effect at any follow-up point.

These findings should be interpreted in light of the limited job information available through the RCT surveys. NPower Canada uses more detailed information and a broader range of data sources to identify digitally enabled roles. **Box 2**, presented below the table, explains this approach and presents NPower Canada's administrative results separately. Because the two analyses use different data, classifications, and denominators, the results are not directly comparable.

Table 16 | Regression coefficients for digitally enabled employment

Timepoint	% in IT role (program)	% in IT role (comparison)	Difference (program to comparison)	Effect estimate (regression -adjusted)	Standard error	P-value	Confidence interval (95% CI)
JDA stream							
Exit	18	14	4	0.038	0.069	0.577	−0.096–0.173
Six months	26	23	3	0.023	0.069	0.738	−0.112–0.158
12 months	24	21	3	0.049	0.071	0.491	−0.091–0.189
JITA stream							
Exit	10	9	1	0.009	0.038	0.815	−0.065–0.082
Six months	16	15	1	0.012	0.038	0.751	−0.062–0.085
12 months	14	17	−3	−0.012	0.039	0.753	−0.088–0.064

Source. Participant baseline and program exit surveys

p ≤ 0.3 p ≤ 0.2 p ≤ 0.05 p ≤ 0.01 p ≤ 0.001



"JITA increased perceived opportunities for advancement at six months."

Box 2 | How NPower Canada classifies and tracks digitally enabled jobs

NPower Canada collects information on graduates' employment and education outcomes after they complete its programs. It uses these administrative data to track graduates' progress and assess whether it is meeting its organizational targets.

These data are collected separately from the RCT. They describe the outcomes of NPower Canada graduates, but do not include a comparison group, and therefore cannot show whether JITA or JDA caused those outcomes.

How does NPower Canada classify digitally enabled jobs?

NPower Canada's understanding of a relevant employment outcome has broadened as graduates have moved into a wider range of roles and sectors. In addition to traditional IT positions, graduates have entered administrative, social services, customer service, operations, business and other roles in which digital tools, data or technical knowledge are important to job performance.

NPower Canada classifies a job as digitally enabled when it:

- falls within one of the job clusters targeted by the participant's program; or
- uses the technical or digital skills taught in the program.

NPower Canada maintains a list of roles that commonly meet these criteria. Examples include contact centre representative, technical customer experience advisor, administrative assistant and business analyst. From NPower Canada's perspective, roles outside traditional IT classifications can represent relevant program outcomes when graduates use the skills developed through training or obtain the positions with support from the program's career coaching and job placement services.

How does NPower Canada classify individual jobs?

A job title alone may not show whether a role is digitally enabled. When more information is needed, NPower Canada considers details collected from graduates and employers, including the person's department, employer, industry, job description and responsibilities.

This approach uses more detailed job information than was available through the RCT surveys. Blueprint's analysis was based mainly on participants' reported job titles and sectors of employment. NPower Canada may therefore classify some administrative, social services and other roles as digitally enabled when their digital content was not apparent from the information available in the RCT.

How does NPower Canada collect employment outcomes?

NPower Canada collects employment information through its alumni services, including surveys beginning three months after graduation and continuing for up to five years. It also conducts targeted employment-data collection at specific points in time.

Graduates whom NPower Canada cannot reach are classified as "inactive." They are excluded from the denominator used to calculate the employment rates presented below.

What do NPower Canada's data show?

Table 17 (on the next page) presents NPower Canada's administrative data on digitally enabled employment from May 2022 to May 2024. Across JDA and JITA programs and regions shown, **65%** of graduates who were not classified as inactive were recorded as employed in digitally enabled roles. Rates ranged from **57%** to **79%** across programs and provinces.

These figures should not be directly compared with Blueprint's RCT estimates. NPower Canada's data:

- include graduates rather than all participants offered a program seat;
- exclude graduates classified as inactive;
- use more detailed information to classify jobs; and
- do not compare outcomes with those of a randomly assigned comparison group.

In Ontario and Alberta, the figures cover graduates from the RCT cohorts. In other provinces, they cover all JDA and JITA graduates included in NPower Canada's administrative reporting during the period.

Table 17 | NPower Canada's data on employment in digitally enabled roles

Program	Region	% of graduates employed in digitally enabled roles (excluding inactive)	# of graduates in digitally enabled roles	# of graduates (excluding inactive)	# of inactive graduates
All programs	All regions	65%	3,649	5,591	744
JDA	Alberta	74%	242	326	42
	British Columbia	70%	370	529	58
	Manitoba *	71%	5	7	0
	Nova Scotia	79%	60	76	7
	Ontario	67%	433	645	83
	Quebec	62%	34	55	4
JITA	Alberta	70%	369	530	72
	British Columbia	66%	575	872	122
	Manitoba	70%	111	160	18
	Nova Scotia	70%	324	463	64
	Ontario	57%	871	1,514	219
	Quebec	62%	255	414	55

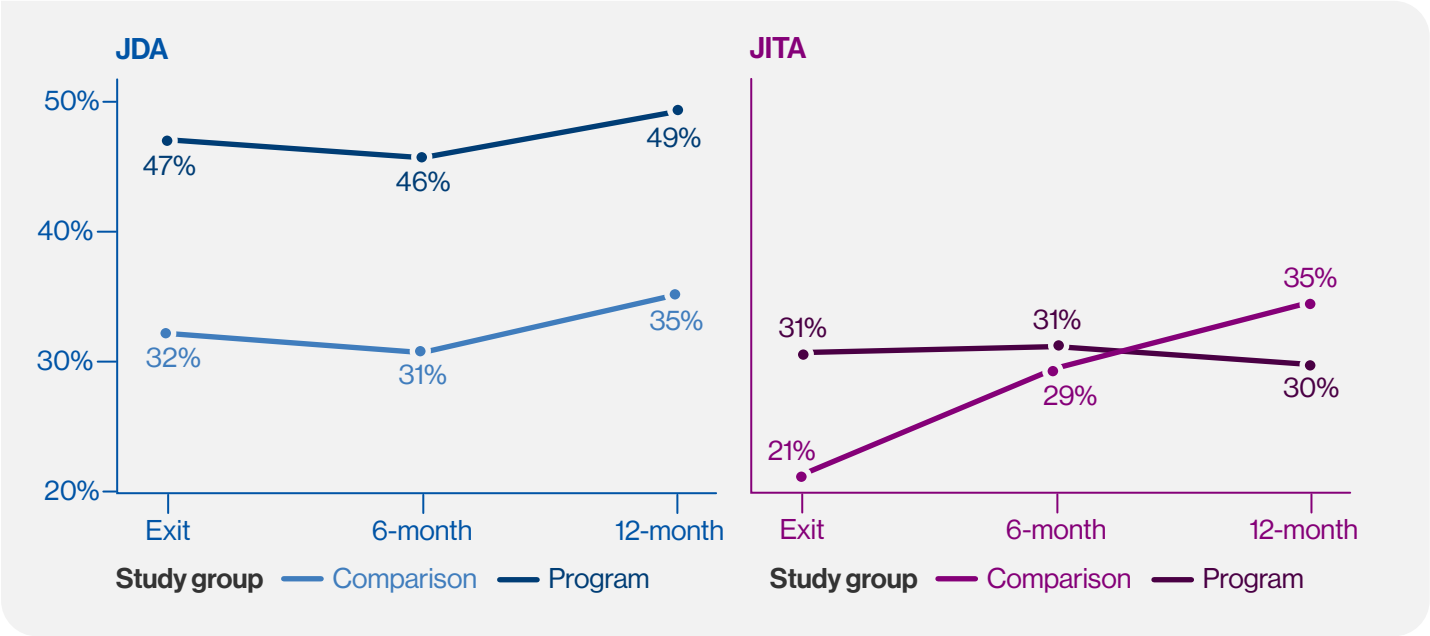
* Prior to the launch of the NPower Canada JDA program in Manitoba, a small number of participants from the province were included in classes for other regions.

Digitally enabled employment rates by program (among employed participants only)

Figure 10 shows the percentage of employed participants working in digitally enabled roles at all time points, by program.[16] Between program exit and 12 months:

- Among employed JDA participants, it remained relatively stable, increasing from **47%** to **49%** (**+2 percentage points**).
- Among employed participants in the JDA comparison group, it increased from **32%** to **35%** (**+3 percentage points**).
- Among employed JITA participants, it remained relatively stable, decreasing from **31%** to **30%** (**–1 percentage point**).
- Among employed participants in the JITA comparison group, it increased from **21%** to **35%** (**+14 percentage points**).

Figure 10 | Rates of digitally enabled employment by program(for employed participants only) whose occupations could be categorized



Source. Exit, six-month, and 12-month follow-up surveys (sample of individuals employed at each time point)

16 We examined digitally enabled employment only among participants who were employed at each timepoint and provided enough information for their jobs to be categorized. This analysis does not capture whether the programs helped participants become employed. Instead, it examines whether participants who found work were more likely to hold a digitally enabled role. Because digitally enabled employment was not measured at baseline, we cannot determine how these rates changed relative to participants' employment before the programs.

Regression-adjusted effect estimates for digitally enabled employment (among employed participants only)

Table 18 presents the regression-adjusted effect estimates for digitally enabled employment among employed participants.

- For **JDA**, employed program participants had higher rates of digitally enabled employment than employed comparison group participants at all three follow-up points. JDA participants were an estimated **11.5 percentage points** more likely to hold a digitally enabled role at program exit (p = 0.209), **12.5 percentage points** more likely at six months (p = 0.123), and **14.5 percentage points** more likely at 12 months (p = 0.083). These estimates represent potential positive effects; they did not meet conventional thresholds for statistical significance.
- For **JITA**, employed program participants were an estimated **6.7 percentage points** more likely than employed comparison group participants to hold a digitally enabled role at program exit (p=0.216), representing a potential positive effect. At six months, digitally enabled employment rates were similar among employed JITA and comparison group participants. At 12 months, the rate was slightly higher among employed comparison group participants. Neither difference was statistically significant, providing no evidence of a JITA effect at six or 12 months. The descriptive trends show that digitally enabled employment increased among employed comparison group participants over the follow-up period, narrowing and eventually reversing the difference observed at program exit.

Table 18 | Regression coefficients for digitally enabled employment for employed JDA and JITA participants whose occupations could be categorized

Timepoint	**% in digitally enabled role** (program)	**% in digitally enabled role** (comparison)	**Difference** (program to comparison)	**Effect estimate** (regression -adjusted)	**Standard error**	**P-value**	**Confidence interval** (95% CI)
JDA stream							
Exit	47	32	15	0.115	0.092	0.209	−0.065–0.296
Six months	46	31	15	0.125	0.081	0.123	−0.034–0.284
12 months	49	35	14	0.145	0.084	0.083	−0.019–0.309
JITA stream							
Exit	31	21	10	0.067	0.054	0.216	−0.039–0.172
Six months	31	29	2	−0.006	0.049	0.902	−0.102–0.090
12 months	30	35	-5	−0.042	0.047	0.377	−0.134–0.051

Source. Exit, six-month, and 12-month follow-up surveys (sample of individuals employed at each time point)

p ≤ 0.3 | p ≤ 0.2 | p ≤ 0.05 | p ≤ 0.01 | p ≤ 0.001

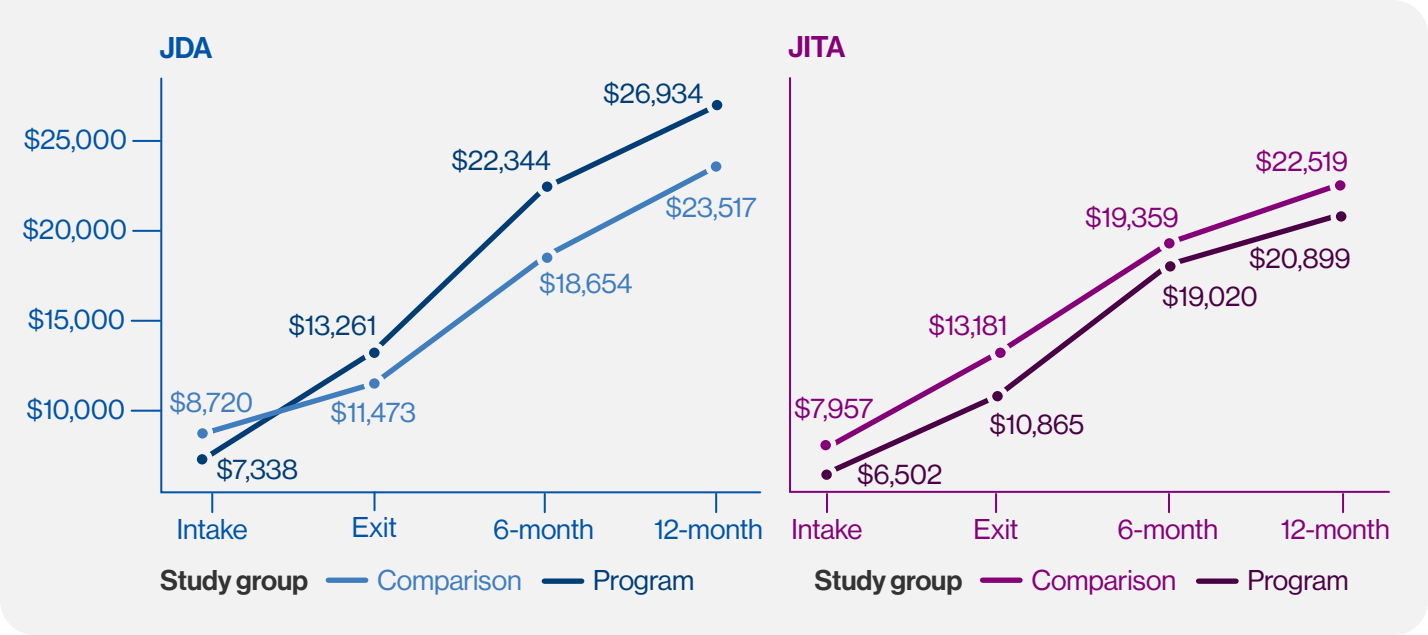
5.3.2.4. Earnings

Average earnings by program

Figure 11 shows average annual earnings for program and comparison groups at each timepoint, by program.[17] As shown, average earnings increased from baseline to 12 months across all groups:

- Among JDA participants, average earnings increased from **$7,338** to **$26,934** (**+$19,596**).
- Among the JDA comparison group, they increased from **$8,726** to **$23,517** (**+$14,791**).
- Among JITA participants, they increased from **$6,502** to **$20,899** (**+$14,397**).
- Among the JITA comparison group, they increased from **$7,957** to **$22,519** (**+$14,562**).

Figure 11 | Average earnings by program



Source. NPower Canada administrative data and exit, six-month, and 12-month follow-up surveys (complete-set sample)

17 We calculated average annual earnings at baseline, program exit, six months, and 12 months. This measure includes both changes in earnings among participants who were already employed and changes resulting from participants moving into or out of employment. Participants with no employment earnings were included with earnings of zero.

Regression-adjusted effect estimates for earnings

Table 19 presents the regression-adjusted effect estimates for earnings.

- For **JDA**, earnings increased more among program than among comparison group participants at all three follow-up points. The estimated difference was **$3,170** at program exit ($p = 0.442$), **$5,071** at six months ($p = 0.219$), and **$4,799** at 12 months ($p = 0.244$). The estimates at six and 12 months represent potential positive effects. There was no evidence of an effect at program exit.
- For **JITA**, changes in average earnings were similar among program and comparison group participants throughout the follow-up period. The regression-adjusted estimates ranged from a decrease of **$861** at program exit to an increase of **$116** at six months. There was no evidence of an effect at any follow-up point.
- None of the estimates met conventional thresholds for statistical significance, so the potential JDA effects should be interpreted cautiously.

Table 19 | Regression coefficients for average earnings (all participants)

Timepoint	Change from baseline: Program group ($)	Change from baseline: Comparison group ($)	Difference (program to comparison)	Effect estimate (regression -adjusted)	Standard error	P-value	Confidence interval (95% CI)
JDA stream							
Exit	$5,923	$2,753	$3,170	3,169.958	4,120.080	0.442	−4,915.761–11,255.677
Six months	$15,006	$9,934	$5,072	5,071.432	4,120.080	0.219	−3,014.287–13,157.152
12 months	$19,596	$14,791	$4,799	4,798.735	4,120.080	0.244	−3,286.984–12,884.455
JITA stream							
Exit	$4,363	$5,224	−$861	−860.600	2,361.284	0.716	−5,491.602–3,770.401
Six months	$11,518	$11,402	$116	116.111	2,361.284	0.961	−4,514.890–4,747.112
12 months	$14,397	$14,562	−$165	−164.606	2,361.284	0.944	−4,795.607–4,466.395

Source. NPower Canada administrative data and exit, six-month, and 12-month follow-up surveys (complete-set sample)

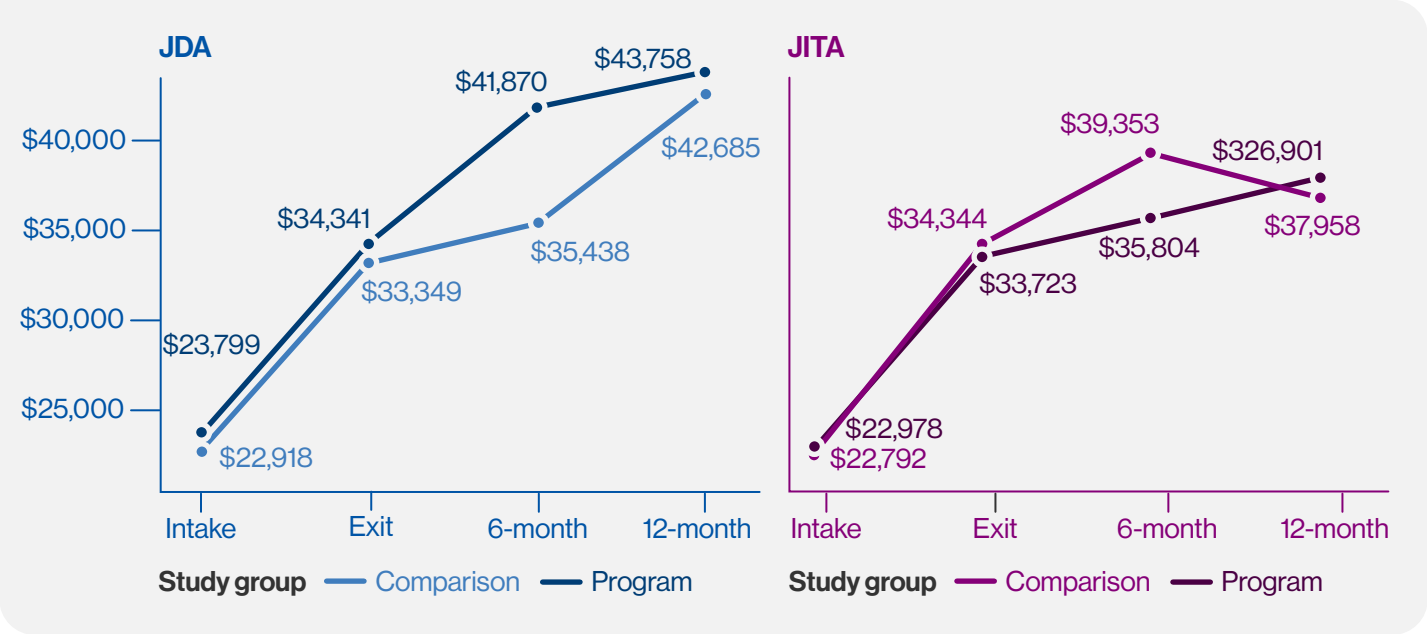
$p \leq 0.3$ $p \leq 0.2$ $p \leq 0.05$ $p \leq 0.01$ $p \leq 0.001$

Average earnings by program (among employed participants only)

Figure 12 shows average annualized earnings among employed program and comparison group participants at each timepoint, by program.[18] As shown, annualized earnings increased from baseline to 12 months across all groups:

- Among employed JDA participants, they increased from **$23,799** to **$43,758** (**+$19,959**).
- Among employed participants in the JDA comparison group, they increased from **$22,918** to **$42,685** (**+$19,767**).
- Among employed JITA participants, they increased from **$22,978** to **$37,958** (**+$14,980**).
- Among employed participants in the JITA comparison group, they increased from **$22,792** to **$36,901** (**+$14,109**).

Figure 12 | Annualized earnings by program



Source. NPower Canada administrative data and exit, six-month, and 12-month follow-up surveys (sample of individuals employed at each time point)

18 We examined whether changes in average earnings across all participants were driven by increases in employment or by higher earnings among those who were employed. To do so, we examined earnings among participants who were employed at each timepoint. This analysis focuses on earnings among employed participants and does not capture whether the programs helped participants become employed.

Table 20 presents the regression-adjusted effect estimates for earnings among employed participants.

- For **JDA**, employed program participants had higher regression-adjusted earnings than employed comparison group participants at all three follow-up points. The estimated difference was **$4,507** at program exit (p = 0.326), **$6,539** at six months ($p$ = 0.097), and **$3,389** at 12 months ($p$ = 0.372). The six-month estimate represents a potential positive effect. There was no evidence of an effect at program exit or 12 months.
- For **JITA**, employed program participants had lower regression-adjusted earnings than employed comparison group participants at program exit and six months. The estimated difference was **–$3,322** at exit ($p$ = 0.191) and **–$3,703** at six months ($p$ = 0.106). These estimates represent potential negative effects. At 12 months, employed JITA participants earned an estimated **$653** more than employed comparison group participants (p = 0.754), providing no evidence of an effect.
- None of the estimates met conventional thresholds for statistical significance, so the potential effects should be interpreted cautiously.

Table 20 | Regression coefficients for annualized earnings (employed only)

Timepoint	Change from baseline: Program group ($)	Change from baseline: Comparison group ($)	Difference (program to comparison)	Effect estimate (regression -adjusted)	Standard error	P-value	Confidence interval (95% CI)
JDA Stream							
Exit	$10,542	$10,431	$111	4,507.370	4,586.577	0.326	−4,495.510–13,510.249
Six months	$18,071	$12,513	$5,558	6,539.204	3,934.904	0.097	−1,184.521–14,262.930
12 months	$19,959	$19,767	$192	3,389.275	3,796.559	0.372	−4,062.897–10,841.446
JITA Stream							
Exit	$10,745	$11,552	-$807	−3,321.902	2,538.957	0 .191	−8,301.898–1,658.095
Six months	$12,826	$16,561	−$3,735	−3,702.662	2,289.061	0.106	−8,192.504–787.180
12 months	$14,980	$14,109	$871	652.893	2,084.551	0.754	−3,435.816–4,741.603

Source. NPower Canada administrative data and exit, six-month, and 12-month follow-up surveys (complete-set sample)

p ≤ 0.3 | p ≤ 0.2 | p ≤ 0.05 | p ≤ 0.01 | p ≤ 0.001

These findings capture earnings relatively early in participants' employment pathways. JDA showed a potential positive effect on earnings among employed participants at six months. JITA showed a different pattern: employed JITA participants had potentially lower earnings at program exit and six months, although there was no evidence that JITA affected earnings among all participants.

NPower Canada has noted that some participants move from jobs that provide immediate income but limited opportunities for progression into entry-level digital or digitally enabled roles. These new roles may offer starting earnings similar to or lower than participants' previous jobs but provide greater potential for skill development and career advancement. JITA also had potential positive effects on access to job benefits at program exit and six months and increased perceived opportunities for advancement at six months. These findings suggest that short-term earnings may not capture all the potential benefits of entering a new career pathway. However, the available data cannot confirm that the participants with potentially lower earnings were the same participants who obtained benefits or perceived greater opportunities for advancement.

Earnings are only one dimension of employment quality. As described in the next section, the evaluation also examined workplace benefits, employment arrangements, job satisfaction, perceived opportunities for advancement, and meaningful work. These measures provide a broader picture of participants' jobs during the first 12 months but cannot show whether early employment transitions led to sustained career and earnings growth. Future analysis using linked Statistics Canada administrative data will extend the follow-up period and examine whether effects on employment and earnings emerge, persist, or change over time.

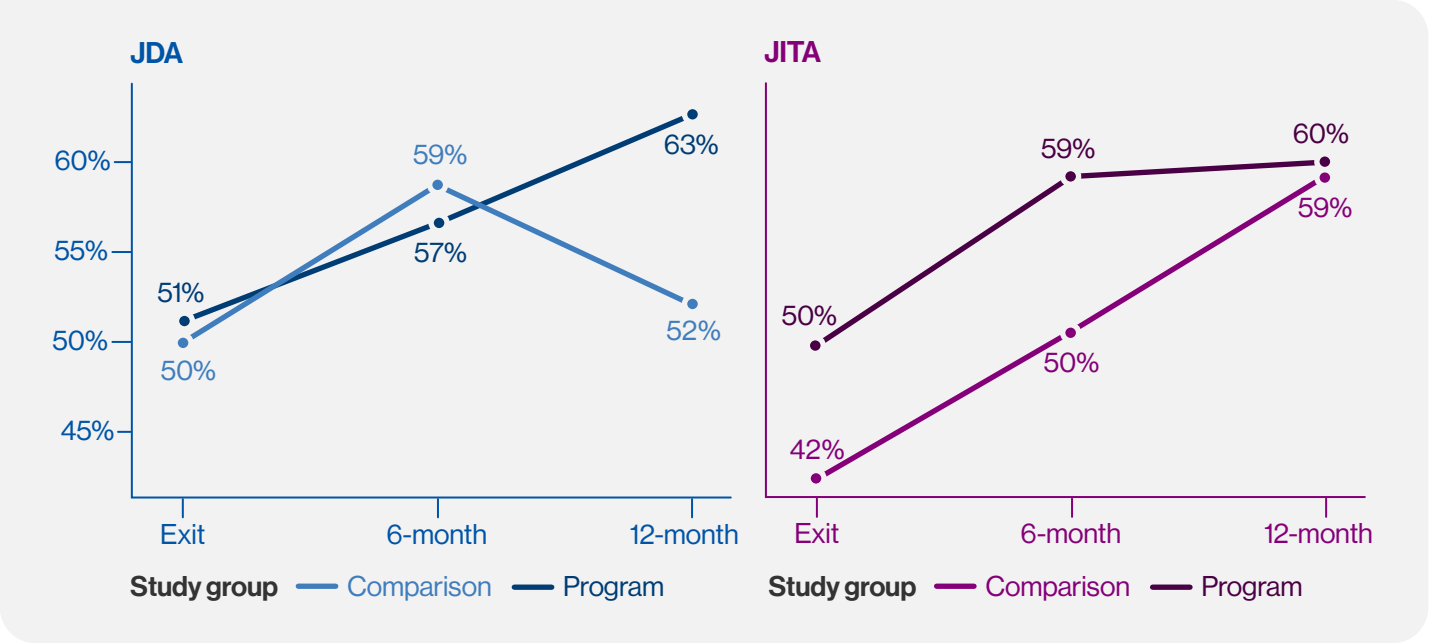
5.3.2.5. Job quality

Access to job benefits by program (among employed participants only)

Figure 13 shows the percentage of employed program and comparison group participants who reported having at least one workplace benefit at each time point, by program.[19] As shown, the share of employed participants with benefits increased from program exit to 12 months across all groups:

- Among employed JDA participants, the share with benefits increased from **51%** to **63%** (**+12 percentage points**).
- Among employed participants in the JDA comparison group, it increased from **50%** to **52%** (**+2 percentage points**).
- Among employed JITA participants, it increased from **50%** to **60%** (**+10 percentage points**).
- Among employed participants in the JITA comparison group, it increased from **42%** to **59%** (**+17 percentage points**).

Figure 13 | Rates of employment with benefits by program (employed only)



Source. Exit, six-month, and 12-month follow-up surveys, sample of individuals employed at each time point

19 To assess whether participants were working in jobs with benefits, employed participants were asked at each survey timepoint to indicate which benefits their employer offered from a list of nine options. We classified participants as having workplace benefits if they reported receiving at least one.

Regression-adjusted effect estimates for job benefits (among employed participants only)

Table 21 presents the regression-adjusted effect estimates for access to job benefits among employed participants.

- For **JDA**, there was no evidence of an effect at program exit or six months. At 12 months, employed JDA participants were an estimated **12.1 percentage points** more likely than employed comparison group participants to have at least one workplace benefit (p = 0.110), representing a potential positive effect.
- For **JITA**, employed program participants were an estimated **6.3 percentage points** more likely than employed comparison group participants to have at least one workplace benefit at program exit (p = 0.256) and **9.1 percentage points** more likely at six months (p = 0.069). These estimates represent potential positive effects. At 12 months, the estimated difference was **2.7 percentage points** (p = 0.546), providing no evidence of an effect.
- None of the estimates met conventional thresholds for statistical significance, so the potential effects should be interpreted cautiously.

Table 21 | Employed with benefits (employed only)

Timepoint	Change from baseline: Program group ($)	Change from baseline: Comparison group ($)	Difference (program to comparison)	Effect estimate (regression -adjusted)	Standard error	P-value	Confidence interval (95% CI)
JDA stream							
Exit	51	50	1	0.030	0.089	0.737	−0.145–0.205
Six months	57	59	−2	−0.003	0.077	0.967	−0.155–0.149
12 months	63	52	11	0.121	0.075	0.11	−0.027–0.269
JITA stream							
Exit	50	42	8	0.063	0.055	0.256	−0.046-0.172
Six months	59	50	9	0.091	0.050	0.069	−0.007–0.189
12 months	60	59	1	0.027	0.045	0.546	−0.062–0.117

Source. NPower Canada administrative data and exit, six-month, and 12-month follow-up surveys (complete-set sample)

p ≤ 0.3 p ≤ 0.2 p ≤ 0.05 p ≤ 0.01 p ≤ 0.001

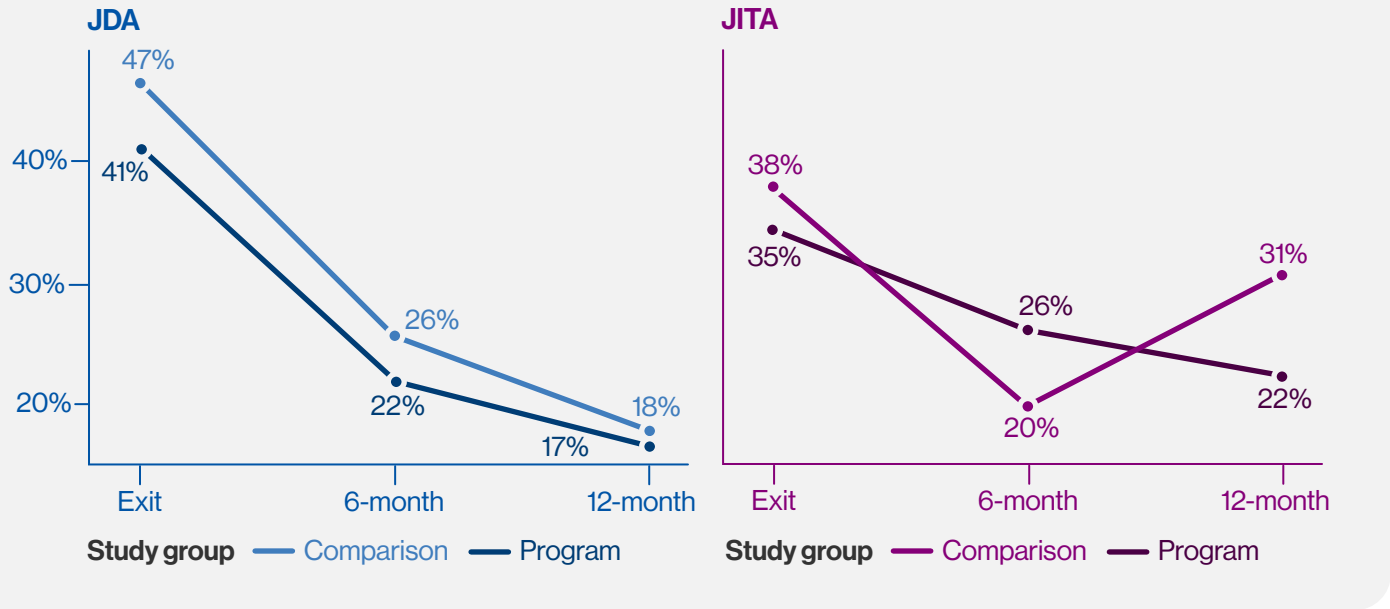
Rates of casual, temporary or fixed-term, shift and seasonal employment by program (among employed participants only)

We examined four measures of job permanence and stability among participants who were employed: casual work, temporary work, which includes fixed-term or contract positions, shift work, and seasonal work. **Figures 14–17** (on the following pages) show the percentage of employed program and comparison group participants in each type of work at each time point.

Across most groups and measures, the share of employed participants in each type declined between program exit and 12 months. Seasonal employment among JITA participants was the exception, remaining relatively stable over the follow-up period.

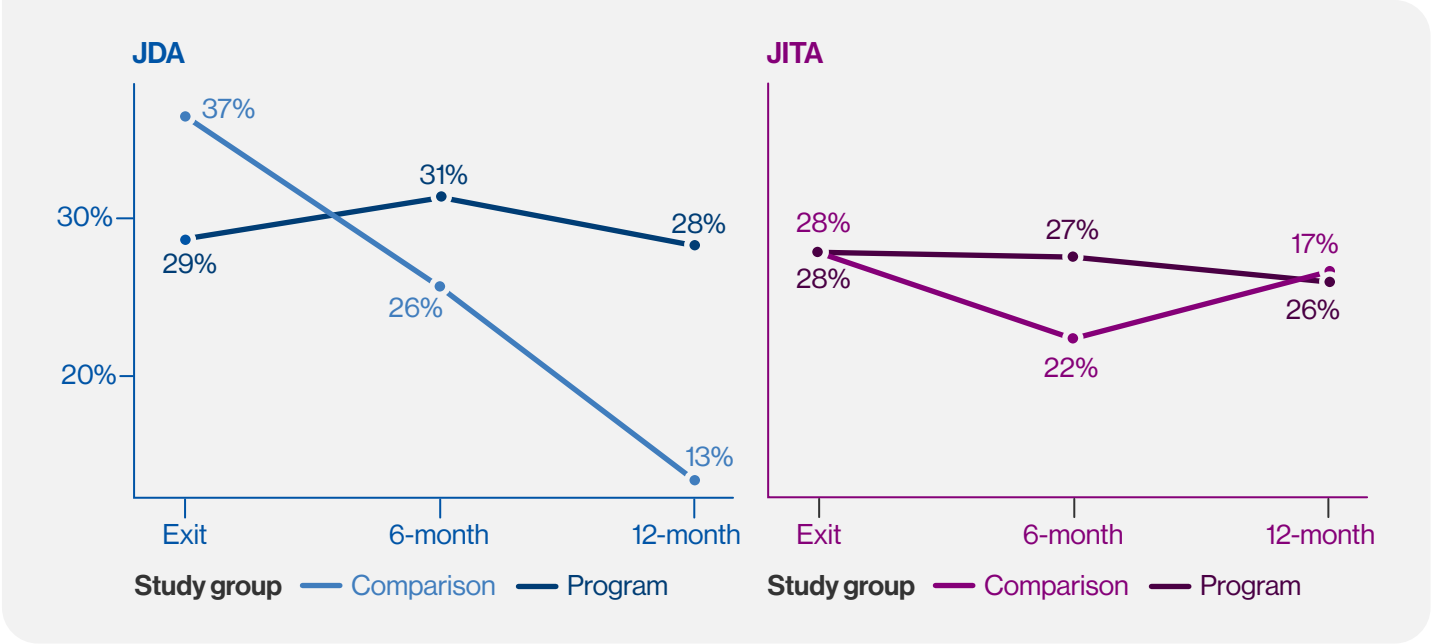


Figure 14 | Rates of casual work by program (among employed participants only)



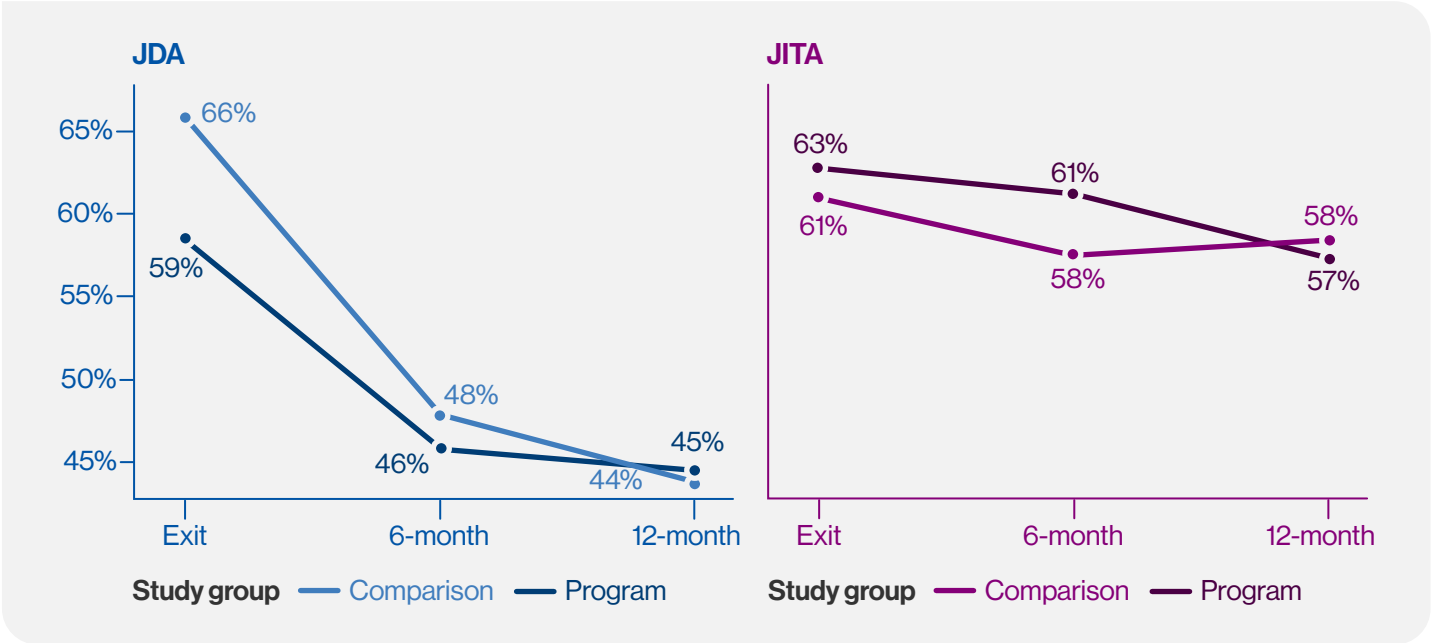
Source. Exit, six-month, and 12-month follow-up surveys (sample of individuals employed at each time point)

Figure 15 | Rates of temporary work by program (employed only)



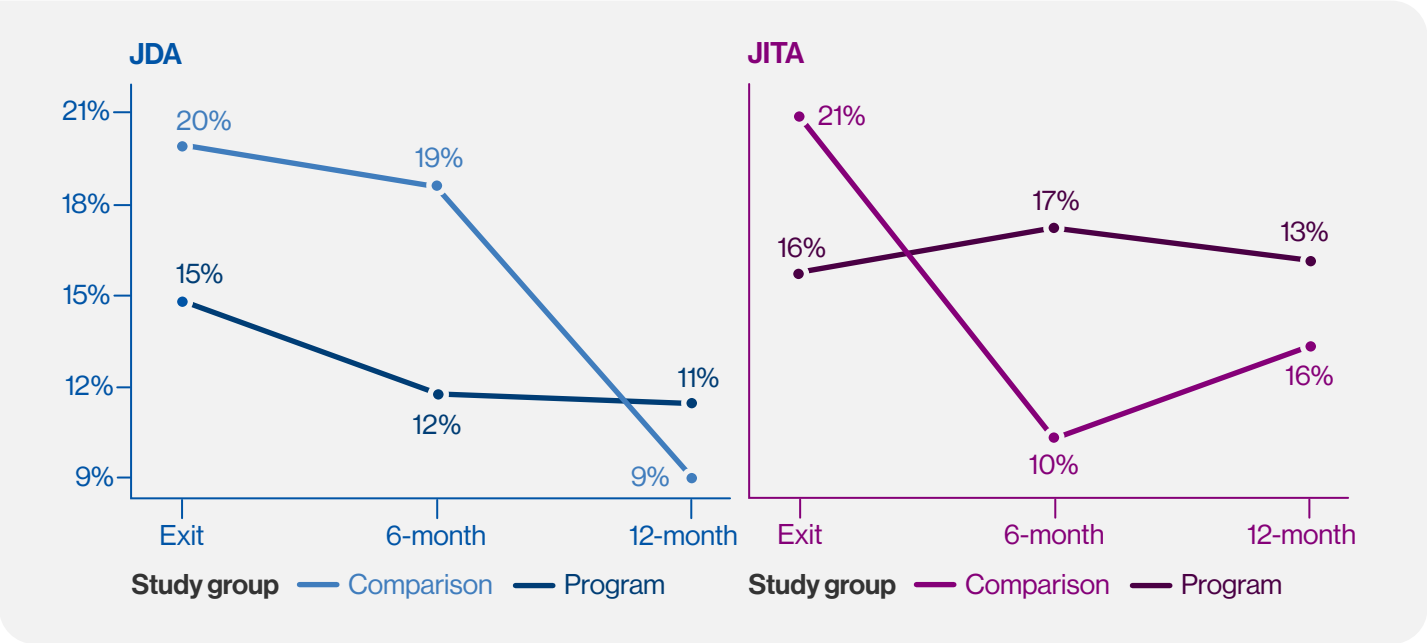
Source. Exit, six-month, and 12-month follow-up surveys (sample of individuals employed at each time point)

Figure 16 | Rates of shift work by program (employed only)



Source. Exit, six-month, and 12-month follow-up surveys (sample of individuals employed at each time point)

Figure 17 | Rates of seasonal work by program (employed only)



Source. Exit, six-month, and 12-month follow-up surveys (sample of individuals employed at each time point)

Enrolment increased among IM&M+ participants by 12 months, but we did not observe a statistically Regression-adjusted effect estimates for casual, temporary or fixed-term, shift and seasonal employment (among employed participants only)

Table 22 (on the next page) presents the regression-adjusted effect estimates for casual, temporary or fixed-term, shift and seasonal employment among employed participants.

- For **JITA**, **22%** of employed program participants were in casual employment at 12 months, compared with **31%** of employed comparison group participants. JITA potentially *reduced* casual employment by an estimated **7.9 percentage points** (p = 0.058). This estimate fell just short of the conventional threshold for statistical significance. There was no evidence of an effect on casual employment at program exit or six months.
- JITA also potentially increased seasonal employment at six months. **Seventeen percent** of employed JITA participants were in seasonal employment, compared with **10%** of employed comparison group participants. The regression-adjusted increase was **5.1 percentage points** (p = 0.182). There was no evidence of an effect on seasonal employment at program exit or 12 months.
- For **JDA**, **28%** of employed program participants were in temporary or fixed-term employment at 12 months, compared with **13%** of employed comparison group participants. JDA increased temporary or fixed-term employment by an estimated **14.3 percentage points** (p = 0.035). This finding cannot be clearly interpreted as positive or negative because the measure includes fixed-term contracts, which may provide an entry point with a new employer but may offer less employment security. There was no evidence of an effect at program exit or six months.
- There was no evidence that JDA affected casual, shift, or seasonal employment at any follow-up point. There was also no evidence that JITA affected temporary or fixed-term employment or shift work at any follow-up point.

Table 22 | Employed with benefits (employed only)

Stream	Timepoint	Changefrom baseline: Program group ($)	Change from baseline: Comparison group ($)	Difference (program to comparison)	Effect estimate (regression -adjusted)	Standard error	P-value	Confidence interval (95% CI)
Casual work								
JDA	Exit	41	47	−6	−0.100	0.079	0.202	−0.255–0.054
	6 months	22	26	−4	−0.021	0.068	0.756	−0.155–0.113
	12 months	17	18	−1	−0.012	0.067	0.855	−0.143–0.119
JITA	Exit	35	38	−3	0.012	0.051	0.811	−0.087–0.111
	6 months	26	20	6	0.047	0.046	0.305	−0.043–0.137
	12 months	22	31	−9	−0.079	0.042	0.058	−0.160–0.003
Temporary work								
JDA	Exit	29	37	−8	−0.076	0.080	0.342	−0.233–0.081
	6 months	31	26	5	0.066	0.069	0.344	−0.071–0.202
	12 months	28	13	15	0.143	0.068	0.035	0.010–0.276
JITA	Exit	28	28	0	0.009	0.051	0.856	−0.090–0.109
	6 months	27	22	5	0.031	0.046	0.492	−0.058–0.121
	12 months	26	27	−1	0.019	0.042	0.641	−0.062–0.101
Shift work								
JDA	Exit	59	66	−7	−0.024	0.084	0.773	−0.189–0.140
	6 months	46	48	−2	0.017	0.073	0.818	−0.126–0.159
	12 months	45	44	1	0.001	0.071	0.994	−0.139–0.140
JITA	Exit	63	61	2	0.024	0.054	0.651	−0.081–0.130
	6 months	61	58	3	0.034	0.049	0.488	−0.062–0.129
	12 months	57	58	−1	0.013	0.044	0.776	−0.074–0.099
Seasonal work								
JDA	Exit	15	20	−5	−0.051	0.060	0.393	−0.170–0.067
	6 months	12	19	−7	−0.037	0.052	0.48	−0.140–0.066
	12 months	11	9	2	−0.001	0.051	0.986	−0.101–0.099
JITA	Exit	16	21	−5	−0.022	0.042	0.604	−0.104–0.060
	6 months	17	10	7	0.051	0.038	0.182	−0.024–0.125
	12 months	16	13	3	0.022	0.034	0.528	−0.046–0.089

Source. NPower Canada administrative data and exit, six-month, and 12-month follow-up surveys (complete-set sample)

p ≤ 0.3 p ≤ 0.2 p ≤ 0.05 p ≤ 0.01 p ≤ 0.001

Rates of job satisfaction, perceived opportunities for career advancement, and meaningful work by program (among employed participants only)

We examined three measures of perceived job quality among participants who were employed at each follow-up point: job satisfaction, opportunities for advancement, and meaningful work.

Job satisfaction and opportunities for advancement were measured using five-point response scales. Responses were assigned values from −2 to +2, with higher scores indicating greater satisfaction or stronger perceptions of advancement opportunities. **Table 23** shows how the responses were coded.

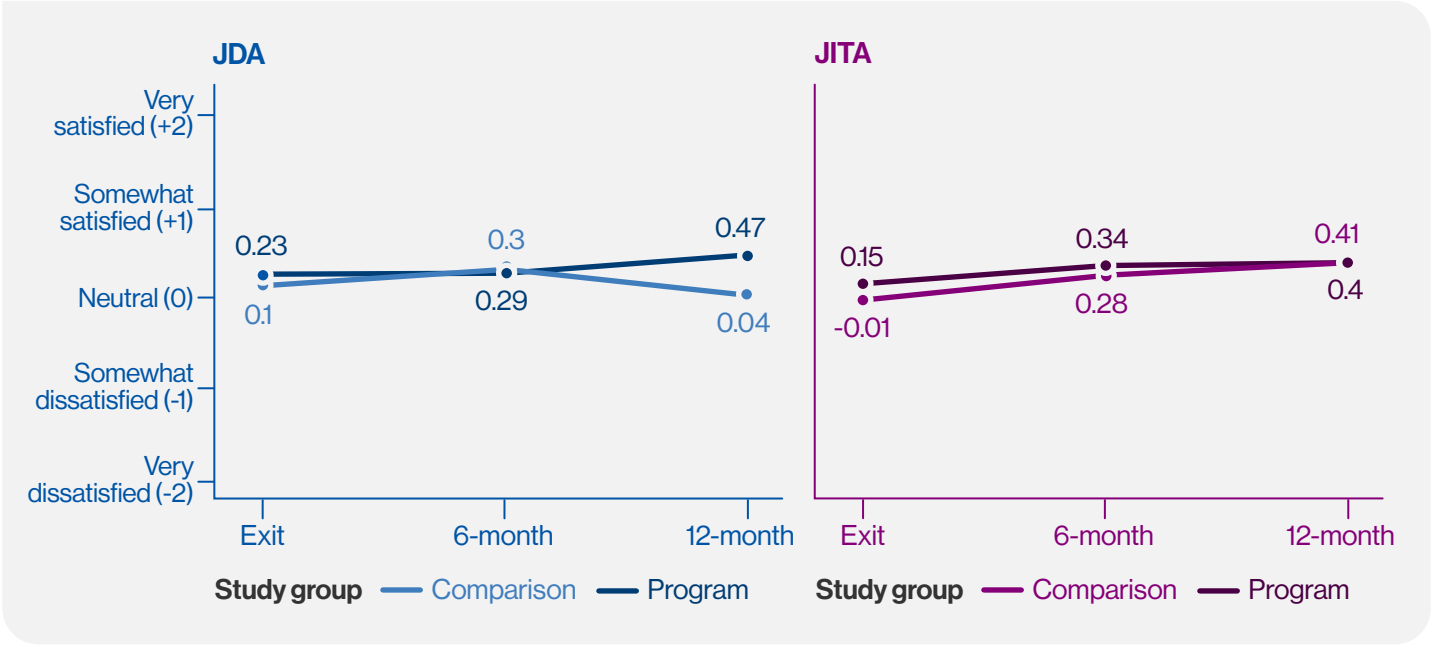
Meaningful work was measured differently. Employed participants were asked whether their job gave them a sense of personal accomplishment or an opportunity to make a positive impact on individuals, communities, or society. Participants who answered yes were classified as having meaningful work.

Figures 18–20 (on the next few pages) show results for the three measures at program exit, six months, and 12 months. Across all groups, average job satisfaction and perceptions of advancement were generally stable over the follow-up period. Job satisfaction increased slightly among JDA and JITA participants and members of the JITA comparison group. The share of participants reporting meaningful work remained relatively stable among JDA participants, declined among the JDA comparison group, and increased among both JITA groups.

Table 23 | Numeric coding for job satisfaction and opportunities for advancement

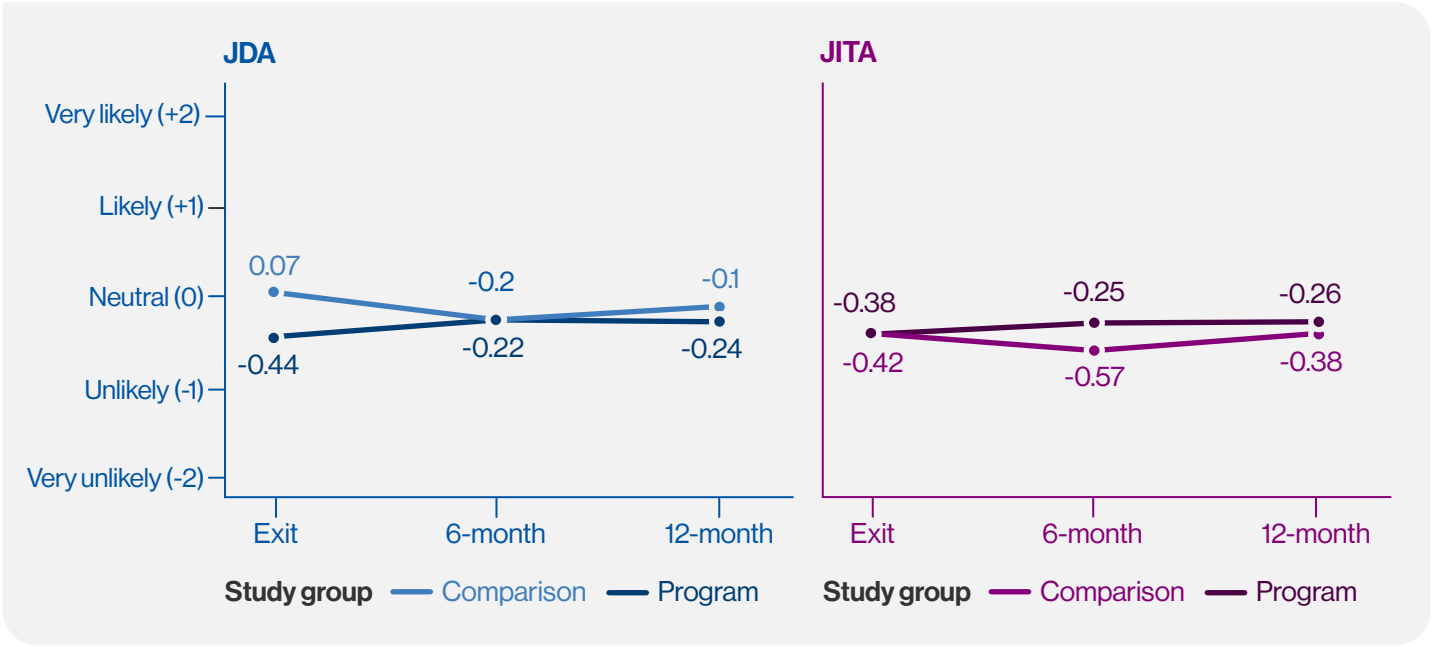
Job satisfaction					
Survey response	"Very dissatisfied"	"Somewhat dissatisfied"	"Neither satisfied nor dissatisfied"	"Somewhat satisfied"	"Very satisfied"
Coding	−2	−1	0	+1	+2
Opportunities for advancement					
Survey response	"Very unlikely"	"Somewhat unlikely"	"Not sure"	"Somewhat likely"	"Very likely"
Coding	−2	−1	0	+1	+2

Figure 18 | Job satisfaction by program (employed only)



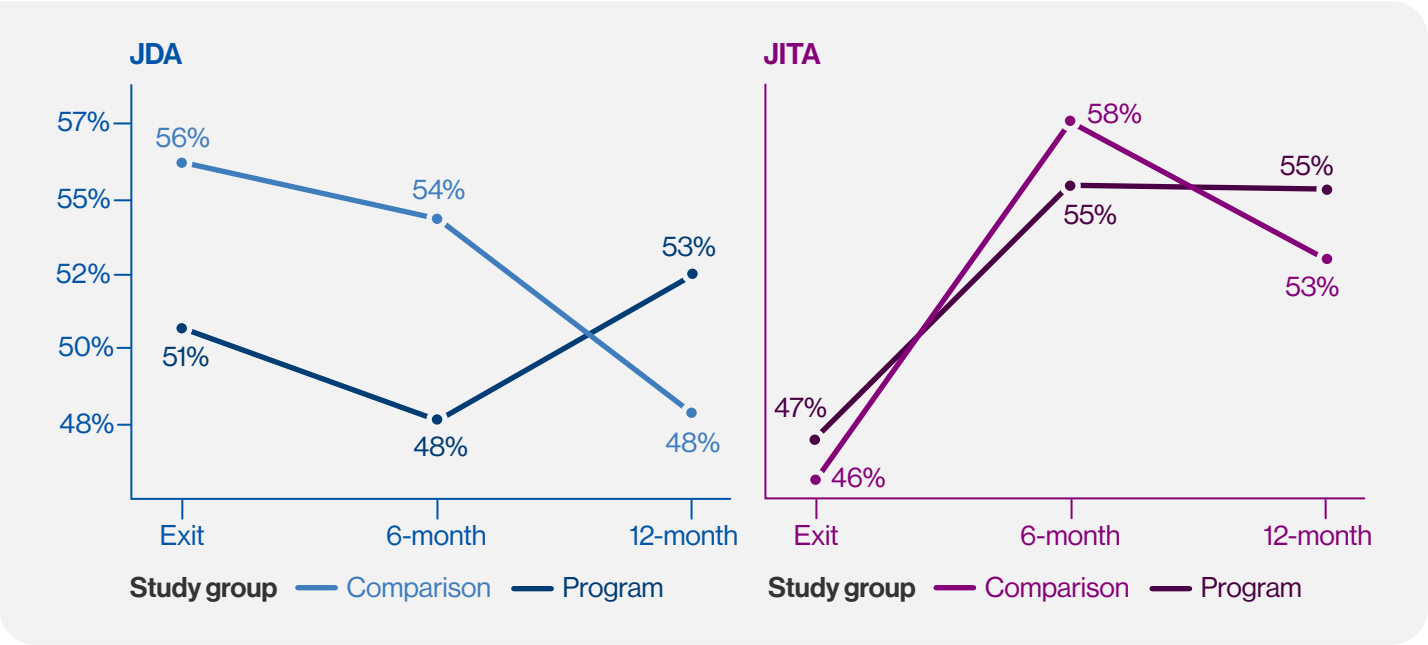
Source. Exit, six-month, and 12-month follow-up surveys (sample of individuals employed at each time point)

Figure 19 | Opportunities for advancement by program (employed only)



Source. Exit, six-month, and 12-month follow-up surveys (sample of individuals employed at each time point)

Figure 20 | Meaningful work by program (employed only)



Source. Exit, six-month, and 12-month follow-up surveys (sample of individuals employed at each time point)

Regression-adjusted effect estimates for job satisfaction, perceived opportunities for career advancement and meaningful work (employed only)

Table 24 (on page 79) presents the regression-adjusted effect estimates for job satisfaction, perceived opportunities for career advancement and meaningful work among employed participants.

- For **JDA**, employed program participants had an average job satisfaction score of **0.47** at 12 months, compared with **0.04** among employed comparison group participants. JDA significantly increased job satisfaction by an estimated **0.52 points** on the five-point scale ($p = 0.024$). There was no evidence of an effect at program exit or six months.
- JDA reduced perceived opportunities for career advancement at program exit. Employed JDA participants scored an estimated **0.49 points** lower than employed comparison group participants on the five-point scale ($p = 0.041$). There was no evidence of an effect at six or 12 months.
- For **JITA**, there was a potential positive effect on job satisfaction at program exit. Employed JITA participants scored an estimated **0.14 points** higher than employed comparison group participants ($p = 0.297$). There was no evidence of an effect at six or 12 months.
- JITA significantly increased perceived opportunities for career advancement at six months. Employed JITA participants scored an estimated **0.32 points** higher than employed comparison group participants on the five-point scale ($p = 0.007$). There was no evidence of an effect at program exit or 12 months.

- There was no evidence that either program affected meaningful work at any follow-up point. At 12 months, 53% of employed JDA participants reported meaningful work, compared with 48% of employed comparison group participants. Among JITA participants, the corresponding rates were 55% and 53%.
- Overall, the results varied by program and follow-up point. JDA reduced perceived opportunities for advancement at program exit, but this effect did not persist, and it increased job satisfaction at 12 months. JITA showed a potential improvement in job satisfaction at exit and increased perceived opportunities for advancement at six months, but neither pattern persisted at later follow-ups.

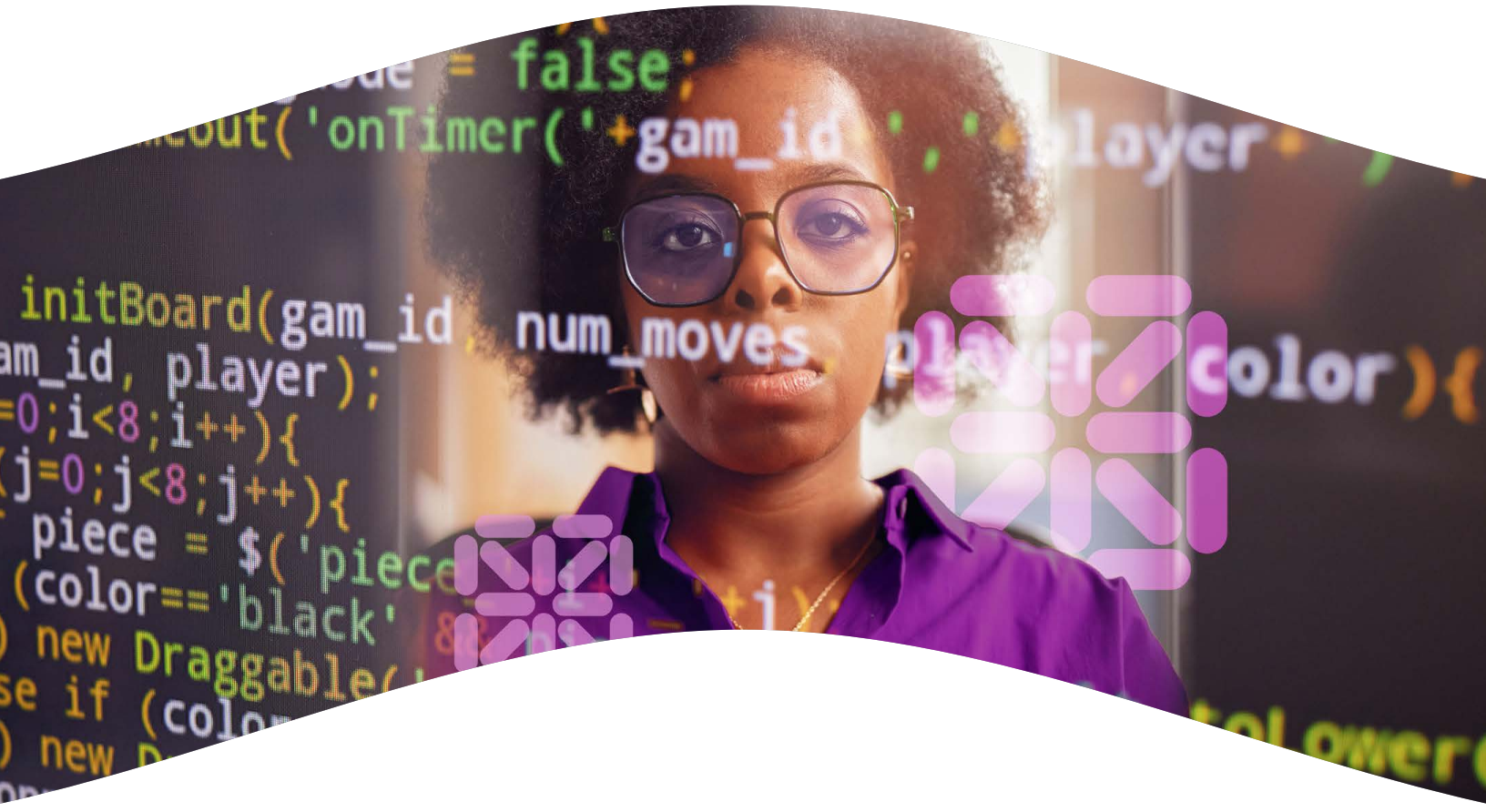


Table 24 | Job satisfaction, opportunities for advancement, and meaningful work coefficients

Stream	Timepoint	Change from baseline: Program group	Change from baseline: Comparison group	Difference (program to comparison)	Effect estimate (regression -adjusted)	Standard error	P-value	Confidence interval (95% CI)
Job satisfaction								
JDA	Exit	0.20	0.17	0.03	0.038	0.222	0.864	−0.400–0.476
	6 months	0.28	0.30	−0.02	−0.021	0.196	0.915	−0.407–0.365
	12 months	0.47	0.04	0.43	0.422	0.187	0.024	0.055–0.789
JITA	Exit	0.13	−0.01	0.14	0.144	0.138	0.297	−0.127–0.414
	6 months	0.33	0.28	0.05	0.050	0.124	0.690	−0.194–0.293
	12 months	0.39	0.41	−0.02	−0.017	0.104	0.874	−0.221–0.188
Opportunities for advancement								
JDA	Exit	−0.44	0.07	−0.51	−0.515	0.234	0.029	−0.978–0.053
	6 months	−0.20	−0.22	0.02	0.026	0.194	0.894	−0.356–0.408
	12 months	−0.24	−0.10	−0.14	−0.134	0.195	0.492	−0.517–0.249
JITA	Exit	−0.38	−0.42	0.04	0.037	0.155	0.812	−0.268–0.342
	6 months	−0.25	−0.57	0.32	0.323	0.131	0.014	0.066–0.581
	12 months	−0.26	−0.38	0.12	0.120	0.114	0.291	−0.103–0.344
Meaningful employment								
JDA	Exit	51	56	−5	−0.023	0.092	0.805	−0.204–0.158
	6 months	48	54	−6	−0.060	0.080	0.455	−0.217–0.097
	12 months	53	48	5	0.076	0.078	0.333	−0.078–0.229
JITA	Exit	47	46	1	0.018	0.058	0.757	−0.095–0.131
	6 months	55	58	−3	−0.047	0.052	0.364	−0.149–0.055
	12 months	55	53	2	0.007	0.047	0.886	−0.086–0.100

Source. Exit survey, six-month follow-up survey, and 12-month follow-up survey (sample of individuals employed at each time point)

$p \leq 0.3$ $p \leq 0.2$ $p \leq 0.05$ $p \leq 0.01$ $p \leq 0.001$

5.4. Cost-benefit analysis

5.4.1. Overview

At 12 months, we estimate that annual earnings increased by an estimated **$4,799** more for JDA participants than for comparison group members. For JITA, we estimate that annual earnings were instead **$165** lower for JITA participants than for comparison group members. Because neither of these differences were statistically significant, we cannot be confident that JDA or JITA caused these earnings changes or whether they were due to chance, though we have greater confidence in the JDA effect.

The analysis below asks what JDA and JITA's financial benefits might be over 10 years if the estimated earnings changes were indeed caused by each program, and if they continued beyond the 12-month study. These results are conditional projections; they are not observed long-term impacts or forecasts.

Since we did not observe a positive effect of JITA on earnings, it is not possible for it to have a positive net benefit in our models. However, we include it for purposes of comparison against the benefits observed for JDA. Furthermore, NPower Canada's theory of change for JITA indicates that earnings growth as a result of the program may take longer than 12 months, so extrapolating results from 12-month results may not fully capture its impact. As a result, this analysis could be revisited if planned research using linked StatCan data finds evidence of longer-term impacts of JITA.

Key inputs, assumptions, and definitions for our cost-benefit analysis were introduced in **section 4. Methodology**. They are summarized in **Box 3** on the next page.

Box 1 | How to interpret projections

Inputs

- **Starting point.** The model uses JDA and JITA's estimated annual earnings impact at 12 months: $4,799 and −$165 per participant, respectively.
- **Program cost.** JDA and JITA cost an average of $4,446 per participant to deliver in 2022.
- **Time period.** We project potential costs and benefits over 10 years.
- **Three scenarios.** The estimated annual earnings gain for JDA remains at $4,799, gradually decreases to about $1,440, or gradually increases to about $8,158 by year 10. For JITA, it either remains at −$165, decreases to −$50, or increases to −$281 by year 10.

Outputs

- **Net social benefit per participant (NSBP).** An overall per-participant measure of the total benefit created by the intervention, minus its direct and indirect costs.
- **Net social benefit per dollar (NSBD).** A measure of the total benefit created by the intervention, minus its direct and indirect costs, per dollar of direct delivery cost. Results in a ratio of dollars in benefits experienced by society per dollar of delivery cost.
- **Net fiscal benefit per participant (NFBP).** A subset of NSBP that only considers benefits that accrue to government and omits those experienced only by participants. This provides a perspective on whether government is covering its costs on a per-participant basis via increased tax revenue.
- **Net fiscal benefit per dollar (NFBD).** A ratio of net fiscal benefit per dollar of direct delivery cost, indicating the dollars in benefit accrued to government for every dollar invested.

All projected benefits depend on the $4,799 and −$165 earnings estimates reflecting a program impact and the impact continuing beyond the evaluation period. We adjust all future costs and benefits using a 7% annual discount rate as a way to recognize that money received in the future is worth less than the same amount received today.

5.4.2. Potential social and fiscal benefits

We estimate the potential value to society of each of NPower Canada's streams by comparing participants' projected additional earnings with the program's estimated delivery and indirect costs.

Table 25 presents the net social benefits per dollar spent and per participant in each of our three effect scenarios.

Table 25 | Net benefit per participant and per dollar

Trajectory	Welfare Impact	Fiscal Savings	Net Social Benefit		Net Fiscal Benefit	
			(MCPF)	NSBD	NFBP	NFBD
JDA						
Consistent	$22,246.07	$14,249.56	$30,528.52	$6.36	$8,282.45	$1.73
Increasing	$27,743.90	$17,771.15	$39,547.94	$8.24	$11,804.04	$2.46
Decreasing	$14,633.80	$9,373.57	$18,040.27	$3.76	$3,406.47	$0.71
JITA						
Consistent	−$764.87	−$489.93	−$7,221.90	−$1.50	−$6,457.04	−$1.35
Increasing	−$953.90	−$611.01	−$7,532.01	−$1.57	−$6,578.12	−$1.37
Decreasing	−$503.14	−$322.28	−$6,792.53	−$1.42	−$6,289.39	−$1.31
Direct cost is $4,799.00 (actual), $5,967.11 (MCPF) per participant						

Under all three scenarios, investment in JDA generates substantial net benefit to society and returns a moderate fiscal surplus.

Depending on the trajectory of the estimated earnings gain over a 10-year follow-up period, we estimate the following net benefit per dollar for JDA:

- Each dollar spent on JDA produces a net social benefit (NSBD) between **$3.76 and $8.24**.
- Of that net benefit, between **$0.3 and $1.74** accrues to the public as fiscal surplus (NFBD) via increased taxes paid by participants, and the remainder accrues to participants themselves as increased after-tax earnings.

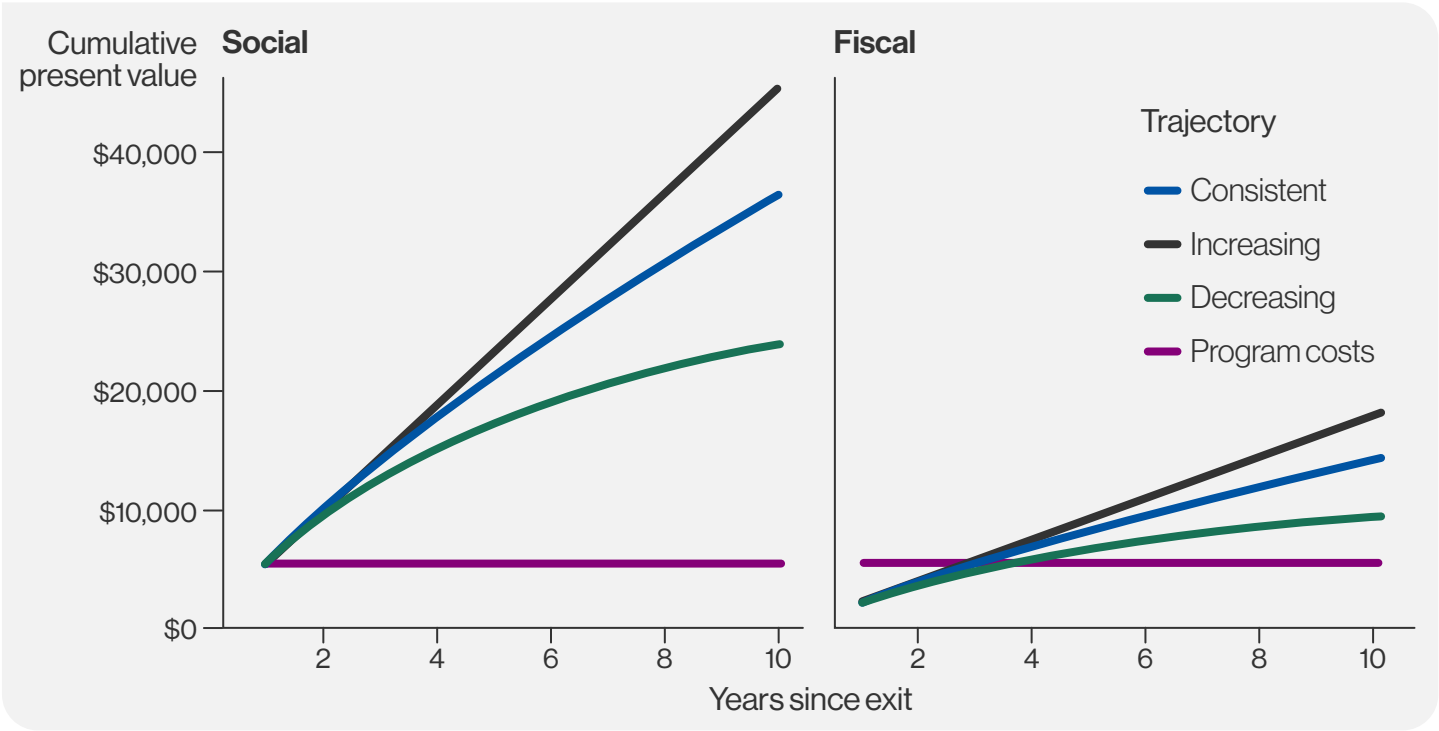
Across these scenarios, we also estimate that JDA generates the following net benefits per participant over this period:

- The total net social benefit per participant (NSBP) generated by JDA ranges from **$18,040.27 to $39,547.94** per participant.
- Of this net benefit, the net fiscal benefit per participant (NFBP) accrued to government via increased tax receipts ranges from **$3,406.47 to $11,804.04** per participant.

Figure 21 presents the total social and fiscal benefit (respectively) per person accumulated by the end of each year in our follow-up window, as well as the direct cost of implementing JDA. The points in each figure where the cumulative net benefit intersect the cost line represent the point at which we estimate that either the social or fiscal benefits generated by JDA start exceeding the costs to run it.

- Under all three scenarios, the **social benefit** generated by JDA exceeds the program cost near the end of the first follow-up year.
- The **fiscal benefit** generated by JDA exceeds program cost at end of the third follow-up year in the *consistent* and *increasing scenarios*, while in the decreasing scenario it exceeds program cost halfway through the fourth follow-up year.

Figure 21 | Cumulative value of per-participant costs and benefits (JDA)



Under all three scenarios, JITA's estimated social and fiscal benefits do not outweigh its costs.

Depending on the trajectory of the estimated earnings effect over a 10-year follow-up period, we estimate the following net benefit per dollar for JITA:

- Each dollar spent on JITA produces a net social benefit (NSBD) between **–$1.57 and –$1.42**.
- Of that net benefit, between **–$1.37 and –$1.31** accrues to the public as fiscal deficit (NFBD) via reduced taxes paid by participants, and the remainder accrues to participants themselves as reduced after-tax earnings.

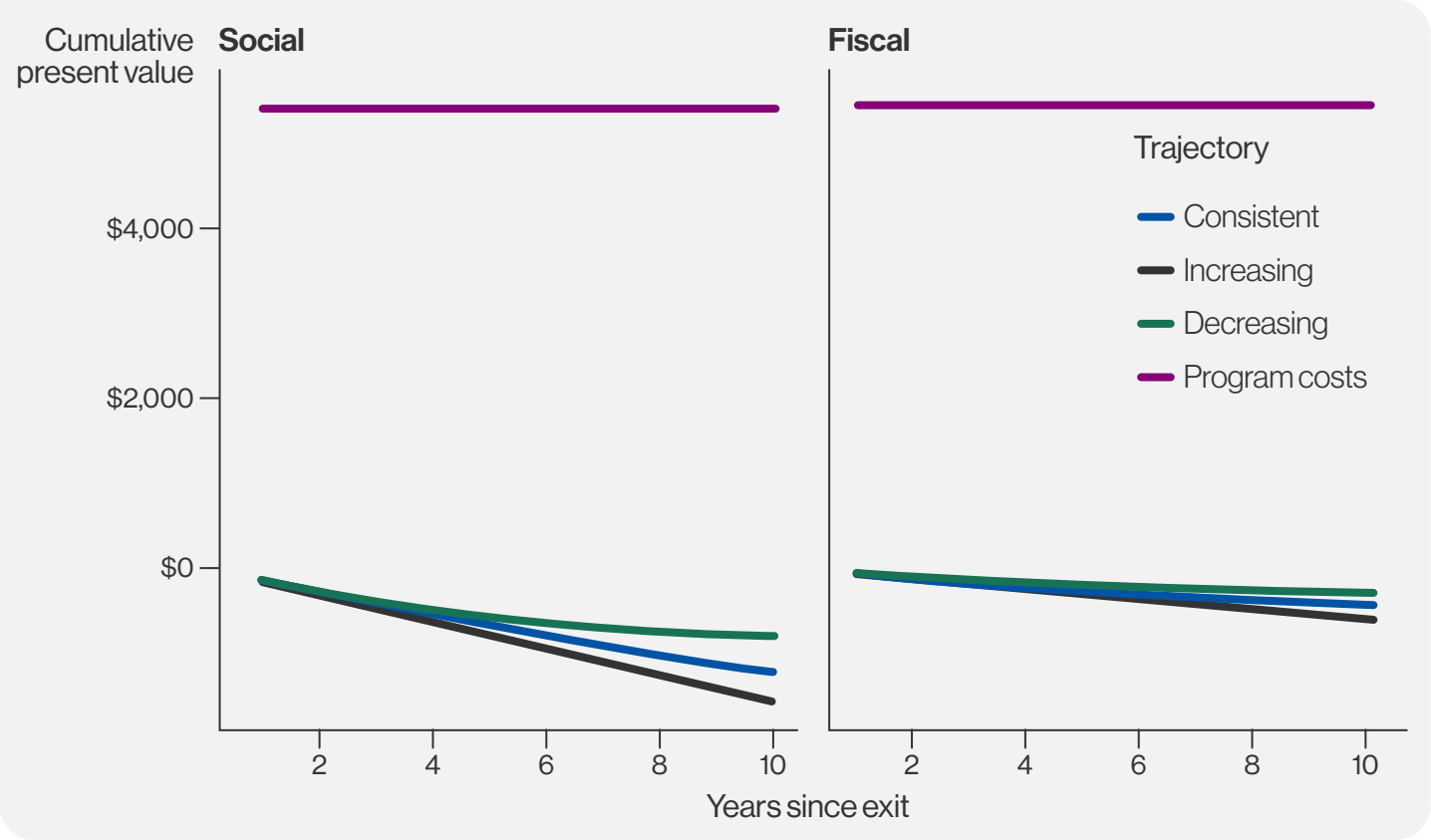
Across these scenarios, we also estimate that JITA generates the following net benefits per participant over this period:

- The total net social benefit per participant (NSBP) generated by JITA ranges from **–$7,532.01 to –$6,792.53**.
- Most of the net fiscal cost per participant (NFBP), from **–$6,578.12 to –$6,289.39**, accrues as fiscal deficit, and the remainder comes out of future after-tax earnings for participants.

Figure 22 presents the total social and fiscal benefit (respectively) per person accumulated by the end of each year in our follow-up window, as well as the direct cost of implementing JITA. At no point do either the social or fiscal benefits of JITA exceed the direct cost of funding it.

As indicated above, these results assume a trajectory of participant outcomes based on 12-month earnings results. If, per NPower Canada's theory of change, JITA results in earnings growth after this point, the program may still produce net social and fiscal benefit.

Figure 22 | Cumulative value of per-participant costs and benefits (JITA)



Across scenarios, JDA's projected net social benefits always significantly exceed JITA's net social costs, and JDA's fiscal benefits also generally exceed JITA's fiscal costs.

Calculations of net social and fiscal benefit allow for direct program comparisons and indicate that JDA produces net social and fiscal benefits that are significantly larger than the net costs estimated for JITA.

In the consistent scenario, JDA produces a net social benefit (NSBP) of **$30,529** per participant, over four times greater than the net social cost per participant of **–$7,221** estimated for JITA. This is reflected in JDA's net social benefit per dollar (NSBD) of **$6.36** being over four times greater than JITA's net cost per dollar of **$1.57**.

From a fiscal perspective, JDA produces a net fiscal benefit per participant (NFBP) of **$8,282** in the consistent scenario, again exceeding JITA's net estimated fiscal cost of **–$6,457**.

The only scenario in which JDA's benefits do not exceed the costs of JITA are net fiscal benefits in the decreasing scenario, in which JDA produces net fiscal benefits per participant of **$3,406** compared to JITA's costs of **–$6,578**. However, even in this scenario JDA's net social benefits per participant (**$18,040**) are still nearly three times greater than JITA's social costs per participant (**–$6,793**).

Appendix D provides the detailed calculations and tests how the results change when key assumptions are varied.



6. Discussion and conclusions

6.1. Summary of findings

NPower Canada reached people facing barriers to employment and groups underrepresented in the digital economy.

Most participants had PSE,[20] yet many were unemployed or had low earnings when they applied. The programs reached a highly diverse population, including high proportions of racialized people, women+, immigrants and newcomers, and people from other equity-deserving groups.

JDA and JITA served different groups, consistent with the roles each targets. JDA participants generally entered with more education and stronger previous labour market attachment, consistent with its focus on more advanced, data-oriented roles. JITA provides a more foundational pathway into entry-level technology work.

Program completion rates were high, and participants found the programs valuable.

Most enrolled participants completed their program. Participants were generally satisfied with the training and supports. Qualitative findings suggest they valued the technical training, professional skills development, job-search support, and wraparound services.

Both programs showed potential positive effects on employment and full-time employment.

Across the RCT, participants generally made progress in the labour market regardless of whether they were offered a spot in JDA or JITA. Overall employment, full-time employment, average earnings, and employment with benefits increased among both program and comparison groups. We

20 NPower Canada notes that many of these credentials were obtained outside Canada. The evaluation did not collect information on where participants obtained their credentials.

cannot yet attribute most of this progress to NPower Canada's programming.

Regression-adjusted findings point to some potential program effects. JDA had potential positive effects on employment at exit, six months, and 12 months, and on full-time employment at 12 months. JITA had a potential positive effect on employment at six months and on full-time employment at six and 12 months. These estimates did not meet conventional thresholds for statistical significance and should be interpreted with caution.

JITA increased IT-related employment at six months. JDA showed potential positive effects on employment in a broader range of digital roles.

JITA increased IT-related employment at six months across the full sample and had a potential positive effect at 12 months. Among employed participants, JITA had potential positive effects on IT-related employment at exit, six months, and 12 months.

There was no evidence that JITA affected IT-related or digitally enabled employment among all participants. Among employed participants, however, JDA had potential positive effects on IT-related employment at six and 12 months and on digitally enabled employment at all three timepoints.

These patterns align with the programs' designs. JITA focuses more directly on foundational preparation for junior IT support and technical roles. JDA prepares participants for data, reporting, and business analysis roles that may be found across many industries.

JDA showed a clearer pattern of potential earnings gains. There was no evidence that JITA affected earnings overall.

JDA had potential positive effects on earnings among all participants at six and 12 months and among employed participants at six months. However, none of these estimates met conventional thresholds for statistical significance.

There was no evidence that JITA affected earnings among all participants at any follow-up point. Among employed participants, JITA earnings were somewhat lower at program exit and six months, with no differences observed by 12 months. JITA's potential positive effects on access to benefits at exit and six months and its positive effect on perceived opportunities for advancement at six months are consistent with this possible pathway in which participants enter new roles that initially provide similar or lower earnings but greater potential for skill development and career advancement. However, the available data cannot confirm this.

If this pattern of earnings gains persists over time, JDA results in large net benefits from a cost-benefit perspective, while JITA results in smaller net costs.

Assuming that these earnings effects persist to some degree over a 10-year period, JDA would result in large social benefits driven by increased participant earnings, as well as fiscal benefits driven by increased taxes paid by participants.

Since we did not observe evidence that JITA affected earnings, we estimate that it would result in net social and fiscal costs. However, this projection is based only on 12-month data and may change if the positive effects observed for JITA within this period ultimately translate into earnings gains after the 12-month mark.

Across scenarios, JDA's estimated net social benefits over 10 years are multiple times greater than JITA's net social costs, and JDA's fiscal benefits also exceed JITA's fiscal costs in two out of three scenarios.

Both programs affected some aspects of job quality, but the effects were mixed and appeared at different times.

JITA increased perceived opportunities for advancement at six months. It also had potential positive effects on access to job benefits at exit and six months and on job satisfaction at exit. JITA potentially reduced casual employment at 12 months and increased seasonal employment at six months.

JDA reduced perceived opportunities for advancement at program exit, but this effect did not persist. At 12 months, JDA increased job satisfaction and temporary or fixed-term employment and had a potential positive effect on access to job benefits. The increase in temporary or fixed-term employment cannot be clearly interpreted as either an improvement or a decline in job quality.

Limited sample sizes and the 12-month follow-up limit what the evaluation can conclude.

Analyzing JDA and JITA separately reduced the number of comparison group participants available for each analysis. As a result, the evaluation may not have had enough statistical power to detect some real program effects. At the same time, some positive estimates may reflect chance rather than real impacts.

The 12-month follow-up period may also be too short to capture changes that take longer to emerge. Longer-term analysis using linked Statistics Canada administrative data will provide more precise evidence on whether impacts on employment and earnings emerge, continue, or change over time.

6.2. Discussion

Based on our evaluation, we identify four key insights.

1. Program outcomes depend on alignment between training, employer demand, and the availability of good-quality jobs.

NPower Canada's dual-client model is built on the idea that employers have high-quality IT-related and digitally enabled jobs to fill, but they cannot always find workers with the technical and professional skills they need. The model seeks to understand employers' needs, translate them into relevant training, and connect employers with jobseekers who might otherwise be overlooked.

Under these conditions, sector-focused training can create value for both participants and employers. Participants gain access to stronger employment opportunities, and employers gain access to workers with relevant skills. However, program quality cannot determine outcomes alone. The availability of suitable jobs, employers' willingness to hire program graduates, and alignment between the skills taught and current labour market needs all matter and shape whether participants move into the roles the programs target.

NPower Canada's theory of change describes a pathway in which participants build skills, find work, and, over time, advance in their careers and increase their earnings. The findings provide some support for the early stages of this pathway.

JITA increased IT-related employment and perceived opportunities for advancement at six months, while JDA showed promising findings across employment, earnings, and movement into IT-related and digitally enabled roles. However, the 12-month follow-up was too short to determine whether these early outcomes led to sustained earnings growth, greater employment stability, or movement into more advanced roles.

NPower Canada has observed that many participants are not moving from unemployment into their first job. Some are moving from customer service, retail, warehouse, hospitality, gig work, or other jobs that provide immediate income but limited opportunities for progression into digital roles. Their previous jobs may pay as much as or more than their first digital role. A short-term decrease in earnings can therefore occur alongside a move into work that provides relevant experience, benefits, professional networks, and a path to more specialized and higher-paying roles. The evaluation cannot confirm that participants made this trade-off or that these longer-term gains occurred. Whether early employment transitions lead to lasting gains will depend in part on the availability of jobs that offer room for progression and continued alignment between training and employer demand.

2. The RCT reflects how JDA and JITA performed during a period of labour market volatility and rapid technological change.

The RCT covered cohorts that began between May 2022 and May 2024. Program delivery for these cohorts continued through August 2024, and participants were followed for 12 months after program exit. During this period, Canada's digital labour market shifted from rapid pandemic-era expansion to slower and less consistent growth, alongside layoffs, restructuring, and economic uncertainty. Demand also varied across roles: employers continued to seek workers with specialized skills and experience even as major technology companies reduced their workforces.[xiv] NPower Canada observed that entry-level digital opportunities became less abundant, competition for available jobs increased, and employers increasingly preferred candidates with previous experience.

AI adoption also accelerated during and after the RCT. In 2023, 7% of Canadian businesses with five or more employees reported using AI, up from 4% in 2021.[xv] By the second quarter of 2025, 12.2% reported using AI to produce goods or deliver services, compared with 6.1% a year earlier.[xvi] Research by the Burning Glass Institute and NPower Inc. suggests that AI may affect entry-level technology roles unevenly. Data analyst, business analyst, data operations assistant, and helpdesk associate were among the roles with greater exposure to automation, while roles requiring more hands-on work, judgement, and interpersonal skills had lower exposure.[xvii] During the evaluation period, NPower Canada also observed employers placing greater emphasis on AI literacy, critical thinking, problem-solving, communication, customer engagement, data fluency, adaptability, and continuous learning.

Although the Burning Glass Institute and NPower Inc. research was completed after the RCT, it illustrates how the mix of entry-level digital opportunities and the skills expected of applicants continued to change. These shifts may be relevant to NPower Canada's explanation that JITA participants can gain a foothold in junior IT roles without an immediate earnings increase. However, program and comparison group participants experienced the same broader labour market, and the RCT did not test whether labour market volatility or AI adoption caused any of the findings. This context describes the conditions under which JDA and JITA were evaluated, but it does not explain the estimated differences between the groups.



"Continued evidence generation can help the organization determine which pathways work best for different participants and how programs should adapt as the labour market changes."

3. Workforce training pathways should continue to adapt as employer needs and participant populations change.

Workforce training programs need to respond as technologies, employer demand, and the characteristics trainees change. NPower Canada's original model focused mainly on young people without PSE and prepared them for entry-level IT roles. During the RCT, it served participants across a broader age range: most had PSE, and many were immigrants or newcomers. JDA was launched in response to employer demand for data skills and growing interest from applicants with more education, work experience, and technical knowledge. NPower Canada also broadened its understanding of relevant employment outcomes to include digitally enabled roles across sectors, not only traditional IT positions.

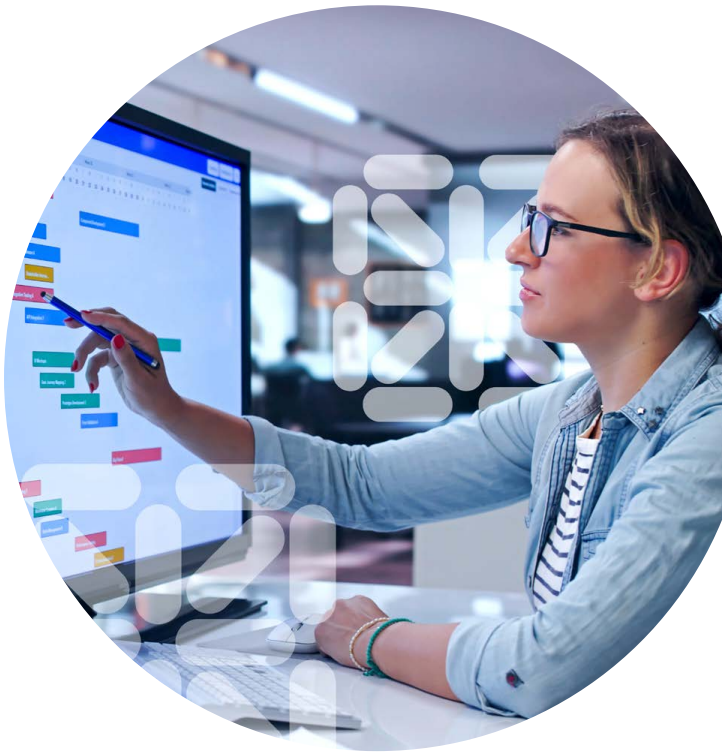
The RCT did not explore whether these adaptations improved program outcomes. However, JDA, NPower Canada's newer and more focused pathway into data-related roles, showed a more consistent pattern of promising findings across employment, earnings, IT-related and digitally enabled work, and job satisfaction. The pattern was less consistent for JITA, a more general and foundational pathway into entry-level IT and digitally enabled work. Because JDA and JITA served different populations and were evaluated separately, these findings do not establish that JDA was more effective or that differences in program design caused the different patterns.

NPower Canada has taken from the evaluation the importance of ensuring that each pathway remains aligned with participants' starting skills and experience, the skills employers need, and the jobs available to graduates. Since the RCT, JDA was enhanced and relaunched as AI & Data Analytics, with more AI-focused content, greater modularity, and additional stackable certifications. NPower Canada has also introduced Network Security Professional as an intermediate pathway for participants with previous IT education or experience. It is developing and exploring sector-specific pathways in mining and minerals analytics and healthcare data and AI. It is also developing programming focused on foundational digital skills and readiness for digital trades.

More broadly, NPower Canada is moving from fixed 15-week program streams toward more modular training that can be adapted for different learners, employers, and sectors. The goal is to respond more quickly to changing employer demand, new technologies, and opportunities in particular sectors while continuing to provide accessible training, wraparound supports, and employment assistance.

These changes demonstrate continued program development, but not their effectiveness. NPower Canada views this RCT as one step in a longer journey of evaluating and improving its programs. It has committed to designing and validating new pathways with employers, piloting and evaluating them, and using the evidence to decide what should be refined, repeated, or scaled. Future evaluation will need to examine whether these pathways respond to employer needs, remain accessible to their intended participants, and help graduates obtain and progress in high-quality employment.

"Longer-term data are needed to determine whether early movement into IT-related and digitally enabled work leads to lasting career gains."



4. Longer-term data are needed to determine whether early movement into IT-related and digitally enabled work leads to lasting career gains.

The 12-month follow-up captured participants' early employment outcomes but may have been too short to assess the full pathway described by NPower Canada's theory of change. Earnings growth, promotions, job changes, and movement into more advanced or stable roles may take several years to emerge. NPower Canada's experience suggests that longer-term progression can include earning additional certifications, receiving internal promotions, moving into specialized technical roles, and transitioning from contract to permanent employment.

This is particularly relevant for JITA. The program increased IT-related employment and perceived opportunities for advancement at six months and had potential positive effects on access to benefits at exit and six months. There was no evidence that JITA affected earnings among all participants at any follow-up point. Among employed participants, JITA earnings were somewhat lower at program exit and six months, with no differences observed by 12 months. These earnings results also influence cost-benefit results, which show JITA having net social and fiscal costs when based on 12-month earnings results. NPower Canada has observed that a participant's first digital role may pay no more, or sometimes less, than their previous work but provide relevant experience, access to benefits, professional networks, and opportunities for advancement. This could help explain the findings, but the RCT cannot confirm whether participants traded short-term earnings for stronger career prospects or whether their earnings increased later.

Longer-term evidence is also needed to understand JDA's findings. JDA showed potential positive effects on earnings at six and 12 months and at six months among employed participants. It also increased job satisfaction and temporary or fixed-term employment at 12 months and potentially improved access to benefits. Further follow-up is needed to determine whether the potential earnings gains persist and whether temporary or fixed-term positions lead to stable employment and career progression. Cost-benefit analyses that assume earnings persist over longer time horizons indicate large net social and fiscal benefits of JDA, but further follow-up would test these assumptions as well as the long-term trend in how earnings effects persist. Furthermore, while we didn't observe JDA affecting some potential sources of cost savings, such as reductions in social assistance usage, longer-term follow-up could identify if any of these sources are influenced over time periods beyond 12 months after programming.

Planned analysis using linked Statistics Canada data will provide a longer follow-up period and administrative measures of employment and earnings. It may also improve the precision of the estimates by reducing reliance on survey responses, although the relatively small randomized comparison groups will remain a limitation. Linked data will help determine whether effects on employment and earnings emerge, persist, or change over time. However, they may not show whether participants remained in IT-related or digitally enabled roles, received promotions, or moved from temporary into permanent positions. Continued participant or alumni follow-up would be needed to assess these dimensions of longer-term career progression.

Appendix A:
Common outcomes framework

Table A1 | Common outcomes framework

	Outcome	Indicators
Socio-demographics	Sex and gender	Sex at birth
		Self-identified gender
	Age	Age
	Location	Province
		Region and municipality
	Marital status	Marital status
	Children and dependents	Children Dependents Household size
	Household income	Household income
	Education	Highest credential obtained
		Location of highest credential attainment
	Indigenous identity	Self-identified Indigenous identity
	Francophone status and languages spoken	First language spoken
		Official languages
		Language spoken at home
		Other languages spoken (at home)
	Citizenship status	Place of birth
		Year of arrival
		Citizenship status
	Racial identity	Self-identification as member of racialized group
	Disability	Self-identified disability
Employment status and history	Employment	Employment status
		Nature of employment (permanent, temporary, full/part-time)
	Earnings	Hours worked/week
		Wages
		Annual earnings
	Industry and occupation of employment	NAICS code of job
		NOC code of job
	Work history	Time since last employed
		NOC code of job
		NAICS code of job
	Income source	Income sources

	Outcome	Indicators
Intermediate outcomes	Program completion	Successful completion of planned activities
	Participant satisfaction	Satisfaction with program
		Perceived utility of program
		Likelihood to recommend
Customized intermediate outcomes	Skills gains	Measured gains in specific skills
	Program-specific credential attainment	Attainment of program-specific credentials
Long-term outcomes	Employment and retention	Employment status
		Nature of employment (permanent, temporary, full/part-time)
		Retention
	Earnings	Hours worked/week
		Wages
		Annual earnings
	Benefits	Presence of benefits including: paid leave, health and dental coverage, pension plan
	Industry and occupation of employment	NAICS code of job
		NOC code of job
	Job satisfaction	Satisfaction with job
		Perceived opportunity for career advancement
		Perceived job security
	Enrolment in further education	Enrolment in further education
		Type of training
		Field of study
	Credential attainment	Attainment of high school or PSE credentials
		Field of study credentials

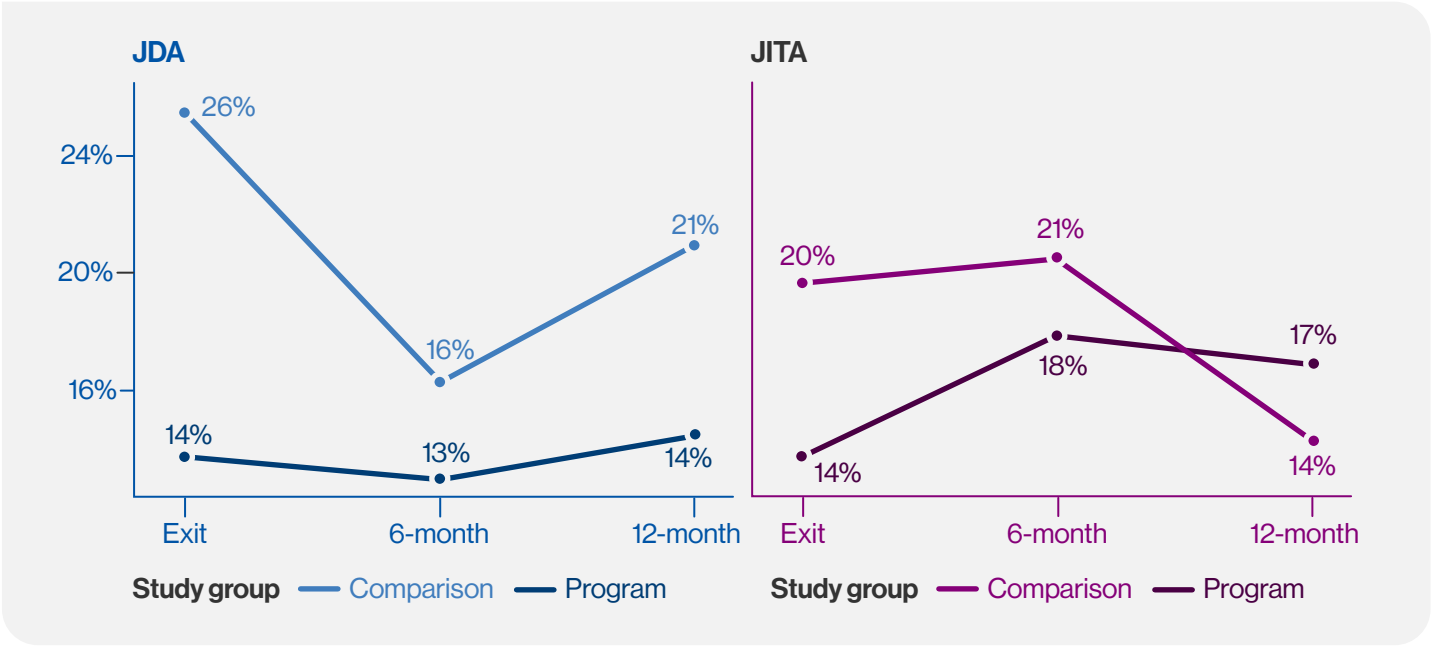
Appendix B:
Education enrolment and social assistance findings

Rates of enrolment in education or training by program

Figure B1 shows the percentage of program and comparison group participants enrolled in education or training at each time point. Between program exit and 12 months:

- Among JDA participants, enrolment remained at **14%** (no change).
- Among the JDA comparison group, it decreased from **26%** to **21%** (**–5 percentage points**).
- Among JITA participants, it increased from **14%** to **17%** (**+3 percentage points**).
- Among the JITA comparison group, it decreased from **20%** to **14%** (**–6 percentage points**).

Figure B1 | Enrolment in education and training by program



Source. Exit survey, six-month follow-up survey, and 12-month follow-up survey

Regression-adjusted effect estimates for enrolment in education or training

Table B2 (on the next page) presents the regression-adjusted effect estimates for enrolment in education or training.

- At program exit, **JDA** participants were an estimated **11.9 percentage points** less likely than comparison group participants to be enrolled in education or training ($p = 0.068$). This represents a potential negative effect.
- At program exit, **JITA** participants were an estimated **6.0 percentage points** less likely than comparison group participants to be enrolled in education or training ($p = 0.173$). This also represents a potential negative effect.

- The estimated differences were smaller at six and 12 months, providing no evidence that either program affected enrolment at these follow-up points.
- None of the estimates met conventional thresholds for statistical significance, so the potential effects at program exit should be interpreted cautiously.

One likely explanation is that participants who had just completed JITA or JDA were less likely to enrol immediately in another education or training program, while comparison group participants may have pursued other training options. However, the available data do not show why participants did or did not enrol.

Table B2 | Regression coefficients for enrolment in education and training

Timepoint	% in education (program)	% in education (comparison)	Difference (program to comparison)	Effect estimate (regression -adjusted)	Standard error	P-value	Confidence interval (95% CI)
JDA stream							
Exit	14	26	−12	−0.119	0.065	0.068	−0.246–0.009
Six months	13	16	−3	−0.033	0.065	0.61	−0.161–0.095
12 months	14	21	−7	−0.065	0.065	0.319	−0.193–0.063
JITA stream							
Exit	14	20	−6	−0.060	0.044	0.173	−0.146–0.026
Six months	18	21	−3	−0.027	0.044	0.546	−0.113–0.060
12 months	17	14	3	0.026	0.044	0.548	−0.060–0.112

Source. NPower Canada administrative data and exit, six-month, and 12-month follow-up surveys (complete-set sample)

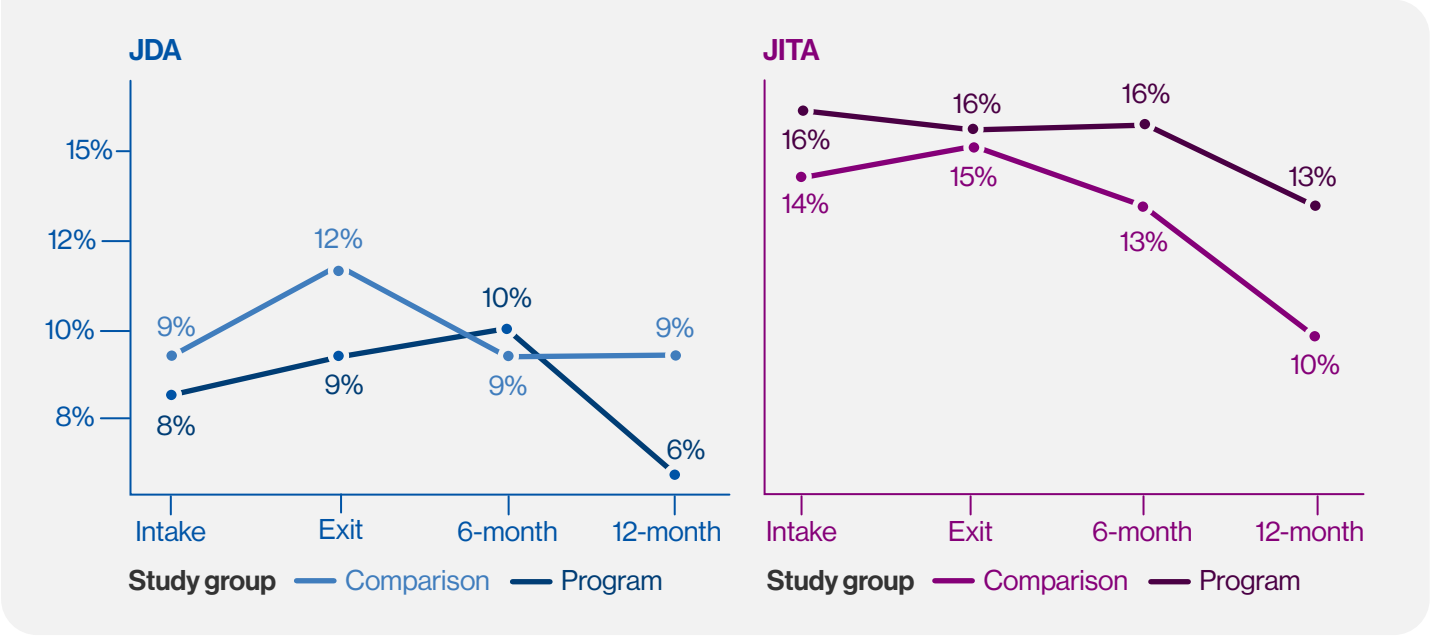
p ≤ 0.3 | p ≤ 0.2 | p ≤ 0.05 | p ≤ 0.01 | p ≤ 0.001

Rates of social assistance receipt by program

Figure B2 shows the percentage of program and comparison group participants receiving provincial social assistance at each time point. Between baseline and 12 months:

- Among JDA participants, social assistance receipt decreased from **8%** to **6%** (**–2 percentage points**).
- Among the JDA comparison group, it remained at **9%** (no change).
- Among JITA participants, it decreased from **16%** to **13%** (**–3 percentage points**).
- Among the JITA comparison group, it decreased from **14%** to **10%** (**–4 percentage points**).

Figure B2 | Social assistance receipt by program



Source. NPower Canada administrative data, exit survey, six-month follow-up survey, and 12-month follow-up survey

Regression-adjusted effect estimates for social assistance receipt

Table B3 (on the next page) presents the regression-adjusted effect estimates for social assistance receipt.

- For JDA, the estimated effects were small and varied in direction across follow-up points. They ranged from a **2.2 percentage-point** decrease at 12 months to a **1.9 percentage-point** increase at six months. There was no evidence of an effect at any follow-up point.
- For JITA, the estimated effects were also small and varied in direction. They ranged from a **1.5 percentage-point** decrease at program exit to a **1.8 percentage-point** increase at 12 months. There was no evidence of an effect at any follow-up point.

Relatively few participants received social assistance, particularly in the JDA sample. This reduced the precision of the estimates and made program effects more difficult to detect.

Table B3 | Regression estimates for social assistance receipt

Timepoint	% in education (program)	% in education (comparison)	Difference (program to comparison)	Effect estimate (regression -adjusted)	Standard error	P-value	Confidence interval (95% CI)
JDA stream							
Exit	1	3	−2	−0.012	0.036	0.736	−0.083–0.059
Six months	2	0	2	0.019	0.036	0.608	−0.052–0.089
12 months	−2	0	−2	−0.022	0.036	0.538	−0.093–0.049
JITA stream							
Exit	0	1	−1	−0.015	0.031	0.632	−0.075–0.046
Six months	0	−1	1	0.005	0.031	0.869	−0.055–0.065
12 months	−3	-4	1	0.018	0.031	0.564	−0.043–0.078

Source. NPower Canada administrative data, exit survey, six-month follow-up survey, and 12-month follow-up survey

$p \leq 0.3$ $p \leq 0.2$ $p \leq 0.05$ $p \leq 0.01$ $p \leq 0.001$

Appendix C:
Survey socio-demographics

Table C1 | Balance tables for complete-set sample of survey respondents (variables measured before randomization)

		JDA comparison	JDA program	JITA comparison	JITA program
Equity -deserving groups	Black	2% (1/43)	17% (43/260)	32% (36/112)	30% (149/505)
	Indigenous	0% (0/43)	0% (0/260)	0% (0/112)	0% (0/505)
	BIPOC	93% (40/43)	96% (249/260)	92% (103/112)	91% (459/505)
	Persons with disability	0% (0/43)	3% (9/260)	9% (10/112)	6% (31/505)
	LGBTQ+	5% (2/38)	5% (11/241)	10% (10/103)	6% (30/465)
	Woman+	56% (24/43)	59% (153/260)	71% (79/112)	62% (313/505)
	Any equity-deserving group	93% (40/43)	96% (250/260)	96% (107/112)	93% (468/505)
Age	Youth (<30)	63% (27/43)	49% (127/260)	37% (41/112)	41% (206/505)
	Middle age (30-50)	37% (16/43)	50% (131/260)	59% (66/112)	57% (287/505)
	Older (>50)	0% (0/43)	1% (2/260)	4% (5/112)	2% (12/505)
Migration	Born in Canada	23% (10/43)	18% (46/260)	37% (41/112)	35% (176/505)
	Immigrant	77% (33/43)	82% (214/260)	63% (71/112)	65% (329/505)
	Newcomer (<5 years in Canada)	67% (29/43)	73% (191/260)	54% (60/111)	56% (281/505)

		JDA comparison	JDA program	JITA comparison	JITA program
Education	High school Diploma	100% (43/43)	100% (260/260)	100% (112/112)	100% (505/505)
	Post-secondary education	98% (42/43)	95% (247/260)	82% (92/112)	79% (400/505)
Employment	Employed	40% (17/43)	32% (83/260)	35% (39/112)	31% (156/505)
	Employed full-time	12% (5/43)	14% (36/260)	13% (15/112)	13% (64/505)
	Unemployed	60% (26/43)	68% (177/260)	65% (73/112)	69% (349/505)
Earnings	≥ $25,000	14% (6/43)	19% (49/260)	19% (21/112)	17% (86/505)
Financial assistance	Receiving EI	2% (1/43)	5% (12/260)	7% (8/112)	5% (23/505)
	Receiving social assistance	9% (4/43)	8% (21/260)	14% (16/112)	16% (83/505)
	None of the above	88% (38/43)	87% (227/260)	79% (88/112)	79% (399/505)

Appendix D:
Cost-benefit analysis

This appendix provides additional detail on the cost-benefit analysis presented in section 5.4. It explains what the analysis includes, how program costs were estimated, the assumptions used to project costs and benefits over 10 years, and how the results change when selected assumptions are varied.

Inputs

Table D1 | Assumptions

Outcome	**Effect estimate** (regression-adjusted)	**Standard error**
Annual earnings impact ($\Delta Earn_t$)	$4,799 per participant per year (JDA) –$165 per participant per year (JITA)	Earnings impact at 12 months
Average program cost (D)	$4,446 per participant	Cost measures provided by NPower (2022 cost level per participant)
Projection period (T)	10 years	Period over which potential costs and benefits were estimated
Annual discount rate (r)	7%	Used to express future costs and benefits in today's dollars, following guidance from Canada's Treasury Board Secretariat
Annualized change in the estimated earnings effect by year 10 (g)	No change (0.0%), a 70% decrease (–11.3%) or a 70% increase (+5.4%)	Used to represent different possible paths for the earnings effect after the evaluation ended
Average marginal tax rate (MTR)	34%	Government of Canada, 2022[xviii]
Uncompensated labour supply elasticity (ξ^u)	38%	Jantti et al., 2015[xix]

What earnings estimate did we use?

The cost-benefit analysis uses the $4,799 estimate for JDA and the −$165 estimate for JITA from our earnings analysis as its starting point. The projections therefore show what the financial benefits could be if that estimate reflects an impact caused by NPower programming and continues over time.

How did we estimate program delivery costs?

To estimate the average program cost of $4,446 per participant is based on costing data provided from NPower on the per participant cost of their programming as of 2022.

Our program cost figure does not account for the extent to which JDA and JITA substituted for other publicly funded programming. Comparison group participants may have enrolled in alternative publicly funded services, so we assume there is a substitution effect of some degree (i.e. participation in JDA and JITA reduces participant consumption of other services) but available data on uptake and cost are insufficient to develop a credible approximation. It is likely that our average per-participant cost somewhat overstates the actual difference between the cost of JDA/JITA and the cost of the status quo.

How did we project the earnings effect over time?

The evaluation followed participants for only 12 months. We therefore do not know whether the estimated earnings impact would remain the same, become smaller or grow over a longer period.
To reflect this uncertainty, we modelled three illustrative scenarios:

- **Consistent-effect scenario.** The estimated annual earnings effect remains constant throughout the 10-year period.
- **Decreasing-effect scenario.** The estimated gain decreases annually by 11.3%, decreasing by a total of 70% by year 10.
- **Increasing-effect scenario.** The estimated gain grows annually by 5.4%, increasing by a total 70% by year 10.

Note that since we observe a small negative effect of JITA on earnings at 12 months (−$165), this negative effect becomes slightly larger in the increasing-effect scenario, and slightly smaller in the decreasing-effect scenario.

The increasing- and decreasing-effect scenarios were informed by longer-term findings from the WorkAdvance evaluation. That evaluation found that earnings impacts followed different paths across service providers: at some providers, impacts declined over time, while at others they emerged or grew during later years of follow-up.

WorkAdvance used a different training model from NPower. However, both are sectoral models who serve individuals who are generally unemployed when they entered training. We use the range observed in WorkAdvance to illustrate how JDA and JITA's earnings effect might change, not to predict that either stream will follow the same path.

Intermediate steps

Present value of earnings impact (ΔEarn)

We derive the present value of $\Delta Earn_t$ as a T-period annuity with discount rate r and growth rate g using the canonical formula:[xx]

Marginal cost of public funds (MCPF)

We derive a constant approximation of MCPF, or the social cost of raising one extra dollar of tax revenue, using the formula specified in Bergstrom et al., 2026,[xxi] which they denote as $(1+\phi)$:

Direct welfare impact (WTP) and fiscal benefit (Ω)

WTP is the share of earnings impact left to the participant after taxes, while Ω,[xxii] is the value of the resulting impact on tax revenue:

$$WTP = \Delta Earn \cdot (1 - MTR)$$
$$\Omega = \Delta Earn \cdot MTR$$

Measures

Net social benefit per participant (NSBP). An overall per-participant measure of the total benefit created by the intervention, minus its direct and indirect costs.

$$NSBP = WTP + MCPF(\Omega - D)$$

Net social benefit per dollar (NSBD). A measure of the total benefit created by the intervention, minus its direct and indirect costs, per dollar of direct delivery cost. Results in a ratio of dollars in benefit experienced by society per dollar of delivery cost.

$$NSBD = \frac{NSBP}{D}$$

Net fiscal benefit per participant (NFBP). A subset of NSBP that only considers benefits that accrue to government and omits those experienced only by participants. This provides a perspective on whether government is covering its costs on a per-participant basis via increased tax revenue.

$$NFBP = NSBP - WTP = MCPF(\Omega - D)$$

Net fiscal benefit per dollar (NFBD). A ratio of net fiscal benefit per dollar of direct delivery cost, indicating the dollars in benefit accrued to government for every dollar invested.

$$NFBD = \frac{NFBP}{D}$$

Sensitivity analysis

The cost-benefit results depend on assumptions about future earnings, taxation and spending. We conducted sensitivity analyses to show how the results change when selected assumptions are adjusted. Each test changes one assumption while keeping all other assumptions the same. The tests use the consistent-effect scenario as their starting point. We tested:

- a $1,000 increase or decrease in annual additional earnings;
- a one ppt increase in the assumed average marginal tax rate; and
- a $500 decrease in average per-participant cost.

Changes in additional earnings affect both the social and government results. The other three assumptions affect only the government results because they change estimated tax revenue, not participants' earnings.

Table F2 (on the next page) shows how much each adjustment increases or decreases the net present value and benefit-cost ratio compared with the consistent-effect scenario.

Table F2 | Cost-benefit sensitivity analysis, using consistent-effect scenario

Stream	Adjustment	NSBP	NSBD	NFBP	NFBD
JDA	Baseline	$0.00	$0.00	$0.00	$0.00
	Change in earnings (+/– $1,000 earnings impact)	+/– $7,604.84	+/– $1.58	+/– $2,969.28	+/– $0.62
	Increase in marginal tax rate (+1ppt MTR)	$245.40	$0.05	$582.46	$0.12
	Decrease in cost (–$500 delivery cost)	$621.70	$0.88	$621.70	$0.35
JITA	Baseline	$0.00	$0.00	$0.00	$0.00
	Change in earnings (+/-$1,000 earnings impact)	+/– $7,604.84	+/– $1.58	+/– $2,969.28	+/– $0.62
	Increase in marginal tax rate (+1ppt MTR)	–$8.44	–$0.00	–$20.03	–$0.00
	Decrease in cost (–$500 delivery cost)	$621.70	-$0.03	$621.70	–$0.01

In general, changing the earnings effect could increase or reduce the JDA net benefit while still leaving it highly positive. An increase in the earnings effect for JITA could change it from a net social cost to a net social benefit. Increases in the marginal tax rate improve the benefit of JDA while minimally impacting JITA. Decreases in cost increase the net social and benefit per participant of both streams but slightly decrease the net benefit per dollar of JITA. Since we estimate a small negative earnings effect for JITA, this would mean that reducing the cost of the program does not create more benefit per dollar spent.

However, these tests do not address the most important sources of uncertainty: whether JDA caused the estimated $4,799 earnings gain, or whether JITA produces earnings gains that we did not observe after the 12-month mark. Long-term measurement of the actual effects of each program is required to truly know the net benefits of each program over a 10-year time horizon.

The projections should therefore be interpreted as illustrations of what JDA and JITA's financial benefits and costs could be under the modelled conditions, rather than evidence that each stream has already produced—or will necessarily produce—these longer-term benefits and costs.

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