Financé par le programme des Compétences futures du gouvernement du Canada.

Learning Brief

Lessons from implementing a randomized controlled trial at NPower Canada

Prepared by: NPower Canada with support from Blueprint

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Introduction

As NPower Canada expanded its footprint across the country starting in 2019, its mission remained clear: connect individuals facing barriers to employment with sustainable careers in the digital economy. Its flagship program—the Junior IT Analyst (JITA) program—had been delivered for several years, with earlier evaluations pointing to promising outcomes.

As the organization grew, so did the stakes. Demonstrating impact was no longer just about showing positive results, but about understanding whether those results were driven by the program itself, and what it would take to scale with confidence.

Blueprint and NPower Canada had previously partnered on a two-year non-experimental evaluation (2018–2020), which provided important insights into participant experiences and outcomes and helped strengthen program delivery. At the same time, it highlighted a key limitation: without a strong comparison group, it was hard to determine whether the program itself caused those outcomes.

In response, in 2022 NPower Canada and Blueprint undertook a randomized controlled trial (RCT). The goal was to generate stronger evidence of impact and deepen understanding of how the model works, for whom, and under what conditions. This brief reflects on that experience.

Past evaluation and program growth

Past evaluations have played a central role in shaping both strategic decisions and program delivery at NPower Canada. The earlier evaluation conducted by Blueprint (2018–2020) found positive outcomes for participants, including during the shift to online delivery during COVID-19. These findings supported geographic expansion and helped build momentum toward scaling and more rigorous evaluation.

Evaluation findings also informed targeted refinements. For example, participant feedback on the initial “bootcamp” phase led to its redesign as a more supportive “orientation” week, eliminating negative early experiences.

As NPower Canada expanded, participant characteristics also shifted. The JITA program, originally designed for youth with a high school diploma and limited digital experience, increasingly attracted applicants of all ages—particularly immigrants—with post-secondary education (PSE) and relevant experience.

In response, NPower Canada introduced the JDA program in 2021 to better align training with participants with higher levels of education and experience. While JITA remained the legacy program,

JDA was designed for a different and evolving population. As a result, the two programs increasingly served distinct, though sometimes overlapping, groups.

These shifts highlight that, even as core program models remained well-defined, both the populations served and alignment between participants and program streams were evolving over time.

Why an RCT was the next step

NPower Canada and Blueprint aligned on pursuing an RCT to strengthen evidence of impact. While earlier evaluations showed positive outcomes, they could not determine the extent to which those outcomes were attributable to the program itself.

The NPower model exhibited key features of readiness for rigorous evaluation: consistent delivery over time and well-defined, codified program components. While JITA and JDA differed in maturity—JITA being long established and JDA a newer stream—this evolution reflected an organization scaling and adapting to changing participant needs and labour market demand, rather than a limitation.

Together, these factors made a compelling case for an RCT to support stronger evidence, inform program improvements, and enable future scaling.

Implementing an RCT in a real-world program context

Implementing the RCT required translating a rigorous research design into a real-world program context.

At the design stage, Blueprint and NPower Canada developed an approach that balanced methodological rigour with the organization's commitment to serving as many individuals as possible. This included embedding random assignment into existing operations.

To support implementation, Blueprint developed training materials and tools to help staff communicate the RCT to participants and stakeholders, including guidance on explaining the purpose of the research, obtaining informed consent, and responding to applicant questions.

Collaboration remained central throughout implementation. The organizations worked jointly on survey administration, qualitative data collection, and ongoing refinements, with regular sharing of data and findings to support a shared interpretation.

As implementation progressed, the RCT helped to surface important operational considerations. For instance, NPower Canada encountered challenges in consistently ensuring that applicants entered the program stream best aligned with their skills and experience. While participants in both streams often had post-secondary education (PSE), the type and relevance of that education varied, with the JDA stream intended for individuals with more directly relevant, tech-focused backgrounds. This distinction was not always consistently operationalized in early implementation, resulting in some misalignment between the program participants entered and the one best suited to their skills and experience.

In response, NPower Canada introduced additional screening tools, including an assessment to improve placement across streams. While this tool was not developed as a direct result of the RCT, it had important indirect implications for the study. By introducing greater clarity, standardization, and

intentionality in how participants were assigned to streams, it strengthened confidence in the distinct participant profiles entering each program. This, in turn, supported more accurate interpretation of RCT findings by clarifying how differences in outcomes may relate to program design rather than variation in participant fit. It also reinforced that the two programs serve participants at different stages of their IT career journey, with implications for how success is defined and assessed across streams. These refinements improved alignment over time, while underscoring the dynamic nature of delivering and evaluating programs in real-world settings.

What we learned from our experience delivering an RCT

The RCT provided important organizational learning, particularly in building internal evaluation capacity.

Through this work, NPower Canada developed a deeper understanding of evaluation design and implementation, including the tools, processes, and timelines required to carry out a rigorous study. This strengthened both technical knowledge and practical skills, positioning the organization for future evaluations.

The experience also highlighted key operational considerations, including the need for early planning around resources, staff training, and stakeholder engagement. More broadly, it expanded understanding of when different evaluation approaches are most appropriate.

Looking ahead: How findings will inform future decisions

Findings from the RCT will inform decisions about program design, participant targeting, and delivery, including how to strengthen outcomes for specific subgroups and better match participants to the most appropriate program stream. They will also guide refinements to training, job placement, and retention supports, while evidence from surveys and qualitative interviews will deepen understanding of participant experiences and implementation.

NPower Canada is committed to using both positive findings and areas where outcomes fall short to guide continuous improvement, positioning the RCT as a foundation for strengthening program effectiveness over time.

Conclusions: Key themes from this learning journey

Several key themes emerge from NPower Canada's experience.

First, strong early results are not sufficient to support scaling. Rigorous evidence is needed to understand causal impact and build confidence among funders and decision-makers.

Second, program maturity enables rigorous evaluation but does not imply uniformity. Even well-defined programs may continue to evolve in response to changing participants and labour market demands.

Third, alignment between participants and program models matters. The RCT highlighted both the importance of matching participants to the right program stream and the challenges of doing so in practice.

Fourth, undertaking an RCT is as much an organizational process as a methodological one. It requires navigating real-world trade-offs, such as balancing recruitment targets with program fit, while building internal capacity for evidence use.

Together, these themes reflect a shift from demonstrating outcomes to understanding impact, and from evaluation as a discrete activity to a core part of program development and decision-making. As NPower Canada continues to scale, this approach will support more intentional, evidence-informed growth.

About NPower Canada

NPower Canada is a charitable organization that launches underserved youth and adults, including people with disabilities, BIPOC (Black, Indigenous and People of Colour), women, 2SLGBTQI+ individuals, Indigenous peoples, and newcomers, into meaningful and sustainable careers in technology. Through its free in-demand digital and professional skills training programs, NPower Canada connects jobseekers to employers looking for digital talent.

To date, more than 80% of NPower Canada's 11,000+ alumni have secured in-demand tech jobs such as Help Desk Analyst, QA Specialist, and Information Security Analyst with industry leaders including Accenture, CGI, CIBC, Cisco, Deloitte, IBM, RBC, Softchoice, TD, and TELUS.

About Blueprint

Blueprint is a nonprofit that 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.

About Future Skills Centre

The Future Skills Centre (FSC) 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 are funded by the Government of Canada's Future Skills Program.

Le Centre des Compétences futures (CCF) est un centre de recherche et de collaboration avant-gardiste qui se consacre à l'innovation dans le domaine du développement des compétences afin que toutes les personnes au Canada soient prêtes pour l'avenir du travail. Nous sommes financés par le Programme des compétences futures du gouvernement du Canada.

Empowering Pathways to Digital Employment for Equity-Seeking Groups: National Scaling Insights and Impact from NPower Canada's Workforce Development and RCT Findings is funded by the Government of Canada's Future

Skills Program.

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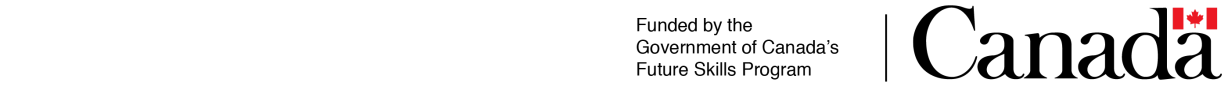
Government of Canada's
Future Skills Program



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