





Expanding and Enhancing a National Recruitment System for the Unionized Construction Industry

Phase two final report

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PROJECT OVERVIEW

INTRODUCTION TO PHASE TWO

With the success of the first phase of the Virtual Recruitment project—which ran between 2020 and 2022—there was overwhelming industry support and interest from provincial building trades councils, unions, affiliated training schools, and employers to further enhance recruitment and engagement capacity for the unionized construction sector in Canada. Building on the previous iteration of the project, Phase Two leveraged the established pan-Canadian partnership network, refined project resources, and engaged thousands of new users online between 2022 and 2024. In this report, we describe the background, implementation, and findings of this project phase, which was led by SkillPlan in partnership with Canada's Building Trades Unions (CBTU), Magnet, and SRDC and funded by Canada's Future Skills Centre (FSC).

Since inception, the goal of the Virtual Recruitment project has been to design, develop, implement, and test solutions that can increase the number of individuals—especially those from underrepresented populations (i.e., women, Indigenous peoples, newcomers, and youth)— initiating steps towards becoming an apprentice and joining the unionized construction trades sector. The project aligns with Future Skills Centre's strategic priorities of creating responsive career pathways through collaborating with sectors and stakeholders to address labour market challenges and equip workers with necessary skills. There are multiple pathways to training and jobs for prospective apprentices. Steps along this pathway include learning about and exploring careers in the skilled construction trades, accessing skills assessments and training supports, and connecting to union apprenticeship, job, and training opportunities across Canada.

To date, the project has developed an array of resources that can support recruitment into the unionized construction sector. National and provincial social media and advertising campaigns have targeted both general audiences and multiple groups underrepresented in many skilled trades (e.g., women, newcomers, and youth) and invited them to explore a provincial Construction Trades Hub site. On this site, users can: explore and learn more about various trades; sign up for the integrated Build Your Skills Learning Hub for access to online learning resources in a range of trades-specific areas; and view and connect with active unions in their region for available jobs and/or training opportunities.

Through the development of these resources, the project has sought to address several challenges prevalent within the unionized construction skilled trades sector. These include how to increase the representation of groups traditionally underrepresented in the construction and building trades, as well as how to increase the recruitment capacity of the unionized construction

sector. By generating social media and paid ad campaigns and website recruitment content that targets these groups, the project aims to increase overall interest in and access to the unionized construction sector and provide both potential recruits and their recruiters (e.g., unions, training schools) with supportive resources. The overall aim is to not only support recruitment efforts but offer prospective apprentices and training providers with the resources needed to help candidates prepare for and succeed in their skilled trades careers.

Why is there a need to increase the recruitment capacity of the unionized construction sector?

Many unions recruit through traditional advertising, career fairs, and word-ofmouth. Enhancing their access to social media and online resources can extend their reach to underrepresented individuals outside these traditional industry networks.

Phase Two of the project, which identified, prototyped, and tested additional and updated components across virtual recruitment resources, involved a range of project activities as documented in Figure 1. This phase of the project: initiated multiple paid social media and advertising campaigns; expanded the repository of marketing and social media assets that provincial partners could use within their local recruitment efforts; improved existing and established new provincial Construction Trades Hub sites; and launched an array of new training resources on the Build Your Skills Learning Hub.



A central goal of Phase Two was to enhance user experience with each virtual recruitment resource and improve pathway navigation between each component. This phase also implemented new ways to connect prospective apprentices to the training and union opportunities they might be looking for. The project continues the pursuit of optimizing and expanding recruitment pathways into the unionized construction sector, especially among people from underrepresented groups.

OVERVIEW OF REPORT

This report first provides a background overview of previous implementation and evaluation activities in Phase One—an important component as it influenced the direction of Phase Two. It then discusses the implementation of Phase Two and describes project activities. A central component of Phase Two was the development of new user pathways, which are discussed in this section. The Phase Two implementation section then provides an overview of the various types of network and knowledge mobilization activities that increased awareness about the project and supported recruitment.

Several sections of the report describe findings from the Phase Two evaluation. The social media and advertising outcome section describes the campaigns and their corresponding performance. The provincial Construction Trades Hub outcomes section gives an overview of provincial sites and their user activity over the course of Phase Two. The Learning Hub outcomes section describes engagement with learning resources, as well as results from the intake survey and usability testing. The final section describes successes and lessons learned from this phase, as well as future plans and opportunities.

PROJECT BACKGROUND

THE SKILLED CONSTRUCTION TRADES RECRUITMENT ECOSYSTEM

The apprenticeship and trades landscape in Canada is complex and has a high degree of provincial variation. CBTU is affiliated with 14 international unions who work in more than 60 different trades and occupations, generating six per cent of this country's GDP (CBTU, n.d.). Unions in Canada are responsible for close to 60 per cent of apprenticeship training (*ibid.*), which also vary by provincial and territorial apprenticeship training systems and opportunities.

What is the unionized construction industry in Canada?

The unionized construction industry is comprised of 14 international unions and unionized workers who work in over 60 different skilled trades and occupations across Canada.

Canada's Building Trades Unions (CBTU) is a national organization that represents these unions by helping to improve labour laws, education standards, and coordination and recruitment activities. There have been efforts to facilitate interjurisdictional coordination of trades training, as well as increase access to and completion of apprenticeships. Prospective learners can face challenges navigating, entering, and progressing through trades training, barriers that potentially burden and discourage people from persisting through their apprenticeship journey. For example, individuals looking to start an apprenticeship have to find a training opportunity, which could be through a union, school, joint training committee, or individual employer. Finding opportunities can be difficult, especially for groups underrepresented in the trades that do not have network support.

As a sector, the construction trades are facing significant challenges meeting labour demands. The sector is forecasted to lose 21 per cent of its workforce to retirement over the next decade (BuildForce Canada, 2024). This represents a significant loss of skills and experience that takes time to replace as new workers entering the labour force work to gain skills, experience, and expertise.

Simultaneously, substantial construction growth is expected over the medium to long term across most regions in Canada. BuildForce Canada (2024) states that the construction industry is expected to recruit over 266,000 new entrants under the age of 30 over the next 10 years. However, competition for highly skilled labour from other sectors can make it challenging for the skilled construction industry to fill labour shortages. The recruitment of skilled workers within the construction industry can often be informal and based on short-term production needs, even when the industry is projected to face long-term labour shortages (Kumarage et al., 2024).

More recently, a core recruitment strategy for the industry has been to increase the workforce by recruiting more underrepresented groups, including women, Indigenous peoples, newcomers, and youth. However, underrepresented groups face challenges entering the trades, and traditional recruiting strategies may not be as effective for these groups. These challenges include a lack of awareness and knowledge of careers in the trades, gaps in Skills for Success, and lack of network connection to the industry.

Traditional channels for recruitment and upskilling/reskilling may not be effective in meeting overall workforce shortages and may exclude underrepresented groups. Online recruitment offers a way to reach a larger number of potential and new recruits. Integrating technology and digital tools can be leveraged for the skilled construction trades by providing the industry a more effective way to connect with prospective apprentices. It also can benefit potential recruits by offering access to flexible opportunities to upgrade their skills, navigate training pathways, and connect to jobs and opportunities.

The Virtual Recruitment project aims to help address these systemic recruitment challenges. As will be discussed next, it has implemented a collaborative model that fosters innovation and integrates technological advancements and emerging practices for improved quality and access to skills training and skilled trades opportunities. Through implementation of a nation-wide recruitment and training system, the project provides prospective apprentices with a way to learn about careers in the skilled trades, access opportunities to upgrade their skills, and navigate the apprenticeship and union system no matter where they are in Canada.

PHASE ONE OF THE VIRTUAL RECRUITMENT AND ASSESSMENT MODEL

Overview of Phase One implementation

Phase One of the Virtual Recruitment project created and implemented a recruitment strategy designed to attract and introduce underrepresented groups to the unionized construction trades. This involved designing, implementing, and testing an innovative model that could increase the number of individuals initiating steps towards becoming an apprentice and joining the unionized construction sector. Working in collaboration with provincial building trades councils across Canada, Phase One sought to support the recruitment capacity of participating provincial building trades councils by creating social media campaigns and new provincial Construction Trades Hub sites where users could access a range of trades, union, and training resources.

Phase One conceptualized the virtual recruitment model through a pathway of engagement (see Figure 2) that began with using both social media and other channels to increase recruitment. National and provincial social media campaigns would spread awareness about the construction sector and invite new recruits to engage with their respective provincial Construction Trades Hub site. Through trades exploration web pages, each site provided local and provincial labour market information, skills requirements across trades, and other information to facilitate informed career exploration. From the provincial sites, users could then register to the Magnet portal access to union, community, and learning resources. Note that, in Phase Two, the portal was removed for a more streamlined and enhanced navigation experience, which we elaborate on later in this report.



Overview of Phase One design phase

The creation of Phase One resources was based on a design process that involved several concurrent and coordinated activities. SRDC began with primary research (e.g., literature review, environmental scan, and needs analysis) to inform the design process overall, while working closely with SkillPlan, Magnet, and provincial partners to develop the key functionalities and content for the provincial sites and Magnet portal. SRDC also developed a Blueprint for Recruitment and Social Media Strategy to inform outreach.

A key conceptual framework used during the design phase was Google's social marketing decision-making model "ACID" (Thygesen, 2018). ACID represents four stages of decision-making: Awareness, Consideration, Intent, and Decision. This model is especially relevant when engaging in complex and important decisions, like applying to a union and starting a construction career. Rather than asking for a large commitment upfront (Decision), this model recommends first taking time to build awareness of trades opportunities (Awareness), then attracting individuals with helpful and interesting information to increase their consideration of trades careers (Consideration), followed by building personal intent and desire to pursue a trades career (Intent).

With this framework, background research sought to understand how individuals from underrepresented groups may experience barriers that prevent them from moving along the ACID decision pathway. Barriers to awareness include a lack of exposure to construction trades career opportunities. Barriers to consideration and intent means that, even when individuals are aware of construction trades careers, they may not consider it as an opportunity they want to pursue (e.g., potential negative view of the trades because of stereotypes). Barriers to decision and action mean that individuals who want to pursue a construction trades career may be unable to enter the industry (e.g., lack of industry connections).

From this background research and framework, provincial Construction Trades Hub sites were conceptualized to be tailored for each region. Site functionality, website architecture, and development of content was initially designed and developed in collaboration with Manitoba Building Trades, with this initial site informing the standards for all provincial sites going forward. On this site, individual trades pages were developed for select construction trades (e.g., boilermaker, heavy equipment operator, insulator, millwright, etc.), which outlined various information, including key responsibilities, skills requirements, employment outlook (e.g., average salary, retirements) and entrance requirements to apprenticeship for that trade. Short video content was also designed through conceptual storyboards and concepts, and then shot onsite for authentic footage.

While the provincial Construction Trades Hub sites were designed to contain regionally specific career exploration content and tools for prospective apprentices, they were also designed to direct users to a virtual portal managed by Magnet. From here, users could then access sites and information with skills assessments, Skills for Success training, and channels to receive and initiate communication with trades unions, community organizations, and other relevant partners to help them initiate steps to becoming an apprentice. As discussed further below, the Magnet portal was removed from the virtual recruitment engagement pathway in Phase Two.

Main outcomes and findings in Phase One

The implementation of Phase One was composed of three interrelated activities: the launch of provincially customized Construction Trades Hub sites, the roll-out of social media campaigns, and the implementation (and subsequent adjustments to) of the Magnet-led portal that integrated learning and assessment resources.

Manitoba Building Trades (MBT), College of the BC Building Trades (BCBT), Saskatchewan Building Trades (SBT), Construction Trades Association of Ontario (CTAO), Building Trades of Alberta (BTA), and CBTU participated in the planning and implementation of project resources:

 Running paid and organic social media campaigns that targeted women, youth, newcomers, and Indigenous peoples between August and December 2022.

- Launching five provincial Construction Trades Hub sites that connected to the Magnet portal and Build Your Skills Learning Hub.
- Making additions and adjustments to the provincial sites, Magnet portal, and Learning Hub as project staff better understood how users navigated the content.

Overall, Phase One of the project was successful at generating significant interest and support from industry stakeholders, including provincial building trades councils and affiliated training schools. The social media campaigns reached new users, with women and Indigenous campaign content having the highest rate of engagement. Throughout Phase One, 4,442 users visited provincial sites at least once, and 217 users signed up to the Magnet portal.

Key lessons from Phase One

Phase one was important in providing stakeholders with ways to engage in collective dialogue on what recruitment resources were needed and how they should be designed. With the development of the project assets, stakeholders were able to better understand the utility of digital tools and resources, which generated strong stakeholder engagement and interest in the project. The creation of a project partnership network also addressed the need for centralized and coordinated activities in the unionized construction industry to deepen the sector's capacity to recruit, engage, and train jobseekers and prospective apprentices in a virtual environment. The project allowed partners to leverage a common digital infrastructure and resources, while reducing duplication. The need for further regional customization in each of the provincial Construction Trades Hub sites became also more evident in this phase.

While the model was designed and implemented to engage with users along the pathway in Figure 2, a key finding from Phase One was that engagement was not always a linear process, nor could the project track a user seamlessly from one platform to another outside of a controlled testing environment. This phase also uncovered certain friction points in the transition between resources, such as requiring users to create a Magnet portal account before they were able to access the Learning Hub.

Additionally, while the Phase One social media campaign was effective in driving traffic to the provincial Construction Trades Hub sites and generally increasing awareness, there remained many opportunities to tailor interactions and communications to different users according to different stages of engagement and decision-making. It was understood that future social media campaigns should consider additional strategies to intentionally move targeted populations from being casual observers to engaging in deeper forms of engagement with project resources. Many of these lessons and others were the starting point for Phase Two implementation.

PHASE TWO IMPLEMENTATION

OVERVIEW OF PHASE TWO IMPLEMENTATION

The primary objective of Phase Two of the Virtual Recruitment project was to build on the lessons learned in Phase One and create "next generation" virtual recruitment resources with augmented functionalities and alternative pathways further customized to the trades context. As discussed in depth next, this phase involved the development of new social media and advertising campaigns that directed users to enhanced national and provincial Construction Trades Hub sites and the updated Build Your Skills Learning Hub. Redesigned pathways of user engagement ensured resources were tailored to different user groups (e.g., explorers, pre-apprentices, and apprentices) and were multi-directional; that is, users engaging with project resources were always a few clicks away from being able to find additional resources.

ASSET CREATION AND ENHANCEMENTS

Social media and advertising campaigns

Along with provincial-led campaign efforts, Phase Two of the project initiated multiple national paid campaigns using new assets throughout 2023 and 2024:

- Campaign one used video and graphic ads to increase traffic to the national Construction Trades Hub site with content that targeted youth, women, newcomers, and anyone looking to explore the trades.
- Campaign two used video, graphic, and carousel ads to drive traffic to the Build Your Skills Learning Hub information page on English-language provincial Construction Trades Hub sites.
- Campaign three used video, graphic, and carousel ads to drive traffic to group-specific landing pages on provincial Construction Trades Hub sites that targeted youth, newcomers, and women.
- Campaign four used video, graphic, and carousel ads, as well as paid search ads on Google, to drive traffic to provincial Learning Hub information pages.
- Campaign five used video, graphic, carousel, and web search ads to drive traffic to a union information page available on several provincial Construction Trades Hub sites.

Multiple regions also undertook their own paid and organic social media campaigns throughout Phase Two. As will be discussed further below in the findings section, regions were given a new repository of social media images and other content that supported their campaign efforts.

Construction Trades Hub site upgrades and new sites launched

Over the course of the project, several updates and enhancements took place on existing Construction Trades Hub sites and new provincial sites were launched in New Brunswick, Newfoundland and Labrador, and Nova Scotia. A key focus in Phase Two was to transition provincial sites to be independently managed by each provincial building trades council with continued support as needed from the web development and project team. In terms of site updates, major changes included:

- Changing website hosting and domain: In Phase One, all sites (other than the Ontario and British Columbia sites) fell under the https://constructiontradeshub.com/ domain (e.g., https://constructiontradeshub.com/manitoba) and were developed/managed by Magnet. Mid-way through 2023, the structure changed so each site had a unique domain (e.g., https://manitoba.constructiontradeshub.com/). This also coincided with a change in website development and management with the company 14 Oranges.
- Upgrading to improve usability and engagement: All sites were redesigned to improve navigation and usability. This included adding clickable icons on the main homepage that direct users to consider the various ways they can use the site, from exploring different trades to signing up for the Learning Hub. In addition, new customized video, photo, and animation content was added to the sites to increase engagement.
- **Redesigning Learning Hub information and sign-up pages:** Navigation improvements increased the number of users connecting to the Build Your Skills Learning Hub. This included redesigning the information and sign-up pages so users could better understand and access these learning and assessment resources. Rather than having to access learning resources via the Magnet portal, users could sign up for the Learning Hub directly from their provincial site.
- Adding new Connect to Unions page content: For provincial sites that include this feature, the Connect to Unions page was updated to include information on the benefits of joining a union and by adding educational video content to make the page more engaging. In the later part of 2023, a sign-up form was also added to these pages for users who wanted to find out more about unions and training opportunities and connect with a liaison.
- Creating underrepresented group landing pages: To support paid ad campaigns in fall 2023, group-specific landing pages specifically targeting newcomers, women, and youth

were created on select provincial sites. These alternative homepages were for use in targeted recruitment efforts and would allow users from these groups to navigate directly to different areas of the site.

Navigation improvements

Along with these site-specific improvements, major updates were made in Phase Two to improve overall navigation and user pathways. During Phase One, virtual recruitment tools and assets were distributed over three websites: provincial Construction Trades Hub sites, the Magnet portal, and the Learning Hub. People who were interested to learn more about the trades were first directed to their provincial Construction Trades Hub site during this previous project phase. From there, they were asked to create a Magnet portal account to access more content and resources. Once on the Magnet portal, they could access the Learning Hub, with the portal serving mainly as an intermediary step between exploring the trades and accessing learning and assessment tools.

Consultations and usability testing with members of the portal's target audience showed that the added navigation to access learning resources was a barrier for many users. Although the Magnet platform had some applicable resources, improvements were necessary to help support a more streamlined experience and better navigation to easily access training resources. Content that was originally hosted on the portal was redistributed over other components of the virtual recruitment resources: in particular, a sign-up form and link to access the Learning Hub was added to each province's Construction Trades Hub site (other than Quebec, which managed intake directly).

In Phase Two, there was also a change in how users could connect with unions. In Phase One, users found information about unions on provincial Construction Trades Hub sites and the Magnet portal. On the Magnet portal, call-to-action buttons encouraged users to "Join a community" to gain access to union contact information. In Phase Two, the Connect to Unions page on provincial Construction Trades Hub sites was updated so that benefits of union membership were clearly visible to users, contact information for unions in each region was accessible, and users had the option to provide their contact information to learn more.

The updated and enhanced Build Your Skills Learning Hub

The Build Your Skills Learning Hub was enhanced and redesigned to offer tailored content to users at different stages of their recruitment pathway: "explorers" who are interested in learning more about various trades and the process of entering the sector; pre-apprentices who are preparing for training; and apprentices who are seeking supportive resources for their trade. The re-designed Build Your Skills Learning Hub included new content and user engagement tools. A contact form was added to the Learning Hub so users could learn more about the unionized construction trades sector and connect with a union if interested. Along with the sign-up form on the provincial Construction Trades Hub sites, this provided users multiple opportunities to provide their contact information to staff at SkillPlan or provincial trades councils who could then follow-up with personalized outreach.

What is the Build Your Skills Learning Hub?

This online adaptive learning environment offers a repository of curated educational resources and supports for all Red Seal construction trades, as well as tools that promote the trades and build awareness of the variety of occupations in construction.

The online learning system includes thousands of learning tools, assessments, products, videos, animations, resources, and supports for explorers, pre-apprentices, and apprentices, as well as trainers and other key stakeholders who support trades training and apprentices.

USER JOURNEY MAPPING

Another major design feature implemented during Phase Two was to direct users to specific resources depending on where they are in their trades training journey. On the Learning Hub landing page, users can select one of three pathways that directed them to customized resources (see Figure 3):

- The Explorer Hub for those who want to learn more about different trades has sections where users can explore different trades, connect to training providers and unions, or learn more about the trades in a Frequently Asked Questions section. Once they are finished exploring, users can go on to access the Pre-Apprentice and/or Apprentice Hubs.
- The Pre-Apprenticeship Hub for those gearing up for an apprenticeship has sections where users can assess their skills or start a more general trades math, science, or reading and document use course. The intent of these learning resources is to expose users to more general learning resources that are needed across a variety of trades, as well as offer them the opportunity to try a practice test to help determine their strengths, areas for improvement, and readiness for trades training.
- The Apprenticeship Hub for those looking to access learning and assessment resources specific to their trade (e.g., "Math for Carpenters," "Math for Bricklayers," etc.), as well as links to higher level and supportive courses applicable to multiple trades (e.g., "Mentorship," "Red Seal Test Prep," "Managing Test Anxiety," etc.). In this section, users can also access courses aimed at improving diversity, inclusion, and equity in the trades, such as "Respectful and Inclusive Workplaces" and "Indigenous Awareness."



Figure 3 Build Your Skills Learning Hub landing page

Expected user engagement can be summarized through journey maps for each of the three types of user pathways (see Figure 4). User journey maps provide an overview of users' profile, goals and motivations, and the steps and thought processes they go through as they navigate the different sites and platforms that are on the virtual recruitment pathway (e.g., social media, provincial sites, Learning Hub). The top section includes a short scenario to give an overview of a typical user's profile (or persona), and representative goals and objectives for users who correspond to that profile. For example, explorers may want to know general information about the trades, while users who are more advanced in their training journey may be interested in connecting with a union (a typical goal for pre-apprentices) or accessing learning resources to prepare for exams (a typical goal for apprentices).

Each step of engagement with the virtual recruitment pathway includes a short statement (in a blue bubble) that represents typical thoughts users may be having at each of the steps. They are not direct quotes collected in interviews with actual users. The steps progress in a logical order, leading to user retention, which can take many forms: following social media accounts, creating an account on the Learning Hub, or creating a bookmark to easily return to the Learning Hub.

The bottom section of journey maps includes actions taken by conceptors and developers to make sure users reach their goals, and opportunities to enhance their experience and promote long-term retention. Initial mapping early in Phase Two helped establish expected outcomes among users, depending on their recruitment and training stage. These maps were further refined with information collected throughout the project.

Elias : Explorer Scenario: Elias is a newcomer to Canada who works in manufacturing and is looking for a new career. Expectations • Clear and complete information • Find training and career opportunities										
Awareness Consideration Decision Retention										
Sees posts about the trades on social media	Clicks on a link that leads to a provincial microsite	Finds a trade that looks interesting	Follows social-media accounts							
Googles information about the trades I don't know much about the trades.	Reads general information about the trades Clicks on trade cards and compares job tasks This looks interesting!	Decides to complete training in that trade I can see myself doing that!	Creates an account on the Learning Hub I want to keep learning more.							
Actions Make sure information Include various types 	n is complete and up-to-date of training pathways	Opportunities • Targeted ads and content • Send timely reminders and								

Figure 4Explorer, pre-apprentice, and apprentice journey maps

Pat : Pre-Apprentice Scenario: Pat is a carpentry pre-apprentice looking to connect with a union. Expectations Information about union brance Clear process to get in touch w								
Awareness	Consideration	Decision	Retention					
Finds out that unions can help find apprenticeship opportunities wonder how I can become a union member?	Searches for info on how to connect with a union Finds union sites and local microsite Compares ways to connect with a union I don't know anyone who can introduce me, but there are other ways.	Fills out the union contact form on the microsite That was fast and easy!	Follows social-media accounts Creates an account on the Learning Hub These learning resources look useful, too.					
Actions Make sure the union Set up a standard ref 	contact form is easy to find erral process	Opportunities • Follow-up after union refe • Encourage unions to share	rral e recruitment success stories					



LEVERAGING AND INTEGRATING PROJECTS INTO VIRTUAL RECRUITMENT

The Virtual Recruitment project is one of many projects accessing the continually expanding Build Your Skills Learning Hub. Through multiple initiatives over the past five years—most of which are funded by Employment and Social Development Canada (ESDC)—SkillPlan, CBTU, SRDC, and other project partners have accumulated a suite of program frameworks and models, implementation strategies and operational practices, materials and tools, and evaluation frameworks and instruments to address the learning gaps in the apprenticeship system.

These other projects supported the development of both the trades-related course material on the Learning Hub, as well as courses related to diversity, inclusion, and equity, such as the "Respectful and Inclusive Workplaces" and "Indigenous Awareness" courses for both employers and tradespeople. Learners and training providers from these projects have become users of the Learning Hub and are among the group of "non-VR" users that are compared to virtual recruitment users in the Learning Hub outcomes section below.

Examples of other projects include:

- The Enhancing Pre-Apprentice and Apprentice Training Tools project, which expanded block training Essential Skills material and ensured they could be used in a self-directed, adaptive, online learning environment. This project provided the foundational structure behind the Learning Hub.
- The Connecting the Dots and Expanding Apprenticeship Success through Improved and Enhanced Systems of Technology projects, which leveraged existing and built additional Learning Hub resources to expand and replicate best practices in online learning and ensure the accessibility of the adaptive online system. These projects supported the development of several online courses now available on the Learning Hub, including "Indigenous and Cultural Awareness" and "Respectful Workplaces."
- The Union Training and Innovation Program Office to Advance Women Apprentices project, which implemented and evaluated a system of wraparound supports that aimed to address barriers faced by women in trades careers. In this project, program participants were encouraged to access the Learning Hub to upgrade their trades-related math and science skills.
- The Supporting Apprentices with Learning Disabilities project, which identified and supported apprentices with learning needs/disabilities using enhanced learning disability assessment tools. Once needs were identified, certain participants were directed to the Learning Hub and provided learning resources aligned with their learning plan.

Like the Virtual Recruitment project, these projects all involved various types of network engagement that increase knowledge about effective learning and recruitment resources. They built and tested resources that were leveraged and integrated into the Virtual Recruitment project, mainly through the development of new and enhanced learning and assessment resources. At the same time, the Virtual Recruitment project has been integral to the design of the Build Your Skills Learning Hub, from the navigation structure to the ability to reach out to find out more about the unionized construction industry.

NETWORK ENGAGEMENT

As established in Phase One, the Virtual Recruitment project is built on a pan-Canadian partnership model to help centralize and coordinate activities across the unionized construction industry in Canada. This type of model allows partners to share digital infrastructure and resources, as well as best practices in local recruitment. To facilitate this coordination, the project created ongoing opportunities to engage partners and bring them together to increase collaboration Canada-wide. Three types of network engagement took place during Phase Two: needs assessment interviews; an in-person meeting of all partners; and a series of knowledge mobilization activities. Along with engaging provincial trades councils, some of these activities also engaged networks of training providers and authorities, employers, governments, and community service organizations that support equity-deserving groups. This broader ecosystem enabled opportunities for collaboration and responsiveness to local and evolving conditions that advance recruitment, training, and advocacy efforts.

Phase Two needs analysis

During spring 2022, a series of needs assessment interviews were conducted by SkillPlan, SRDC, and CBTU with participating provincial trades councils. They aimed to better understand each partner's provincial labour demands and priorities, as well as recruitment goals and objectives in relation to the Virtual Recruitment project. These interviews were strategically timed prior to a planned in-person meeting for these partners to help guide these discussions and enhance Phase Two.

Needs analysis consultations focused on different components of the virtual recruitment strategy, namely the national and provincial Construction Trades Hub sites, the Magnet portal, Learning Hub, and the social media campaign strategies to-date. Consultations aimed to collect feedback on the purpose, content, ease of use, and value of each of these components and to explore the possibility of reorganizing, modifying, and adding new features to the virtual recruitment strategy and system.

To summarize the key findings from the needs analysis, provincial councils saw the value of the national and provincial Construction Trades Hub sites and the Learning Hub but found that the portal added an unnecessary step in the navigation pathway. Provinces also made several suggestions to enhance the content, ease of use, and overall value of their sites, and to share resources that could make content more accessible, diverse, and engaging. Councils agreed that social media campaigns were useful to enhance their online presence and made many suggestions to showcase the benefits of working in the trades and belonging to a union. Alongside social media and other virtual recruitment approaches, they also suggested using more traditional promotion and recruitment activities, such as outreach to schools and teachers, career fairs, and advertising in traditional media.

In-person meeting

In May 2023, SkillPlan convened a multi-day meeting with all partners to review plans for virtual recruitment resource enhancements and discuss ways to improve connections between online users, local unions, and training resources. Overall, virtual recruitment resources were

seen as helping to increase awareness and interest in the unionized construction sector. Partners also discussed the need to make sure that people were reaching out to unions when they were ready and prepared. Some regions employed staff that acted as liaisons and provided intermediary intake support, but there were concerns that this model could not be adequately resourced in every province.

The re-designed Learning Hub was well received among partners, who especially appreciated the improved pathway design and trades-centred curriculum. They saw elements of the learning material as key to the recruitment process, such as assessments that could provide information to unions on an applicant's skill level.

The discussion also highlighted that targeting underrepresented groups continues to be a key aim of provincial trades councils, who recognize that tailored, respectful, and inclusive resources are necessary to support their recruitment. Partners shared examples of group-specific recruitment projects they were engaged in, and conversations explored how the virtual recruitment resources could be adapted for these contexts.

There was also agreement that paid advertising campaigns were a useful way to grow audiences and help partners understand what content worked best. However, partners wanted to better understand what drives "conversions" on Construction Trades Hub sites; that is, users performing key actions (e.g., signing up to the Learning Hub) that would support their career development.

Knowledge mobilization activities

SkillPlan staff also engaged in various types of outreach activities throughout Phase Two that publicized provincial Construction Trades Hub sites and the Learning Hub to leaders and members of the unionized trades sector, government, and industry. While these activities were not formally part of the project—and were therefore not evaluated—they increased engagement and integration with virtual recruitment resources.

Knowledge mobilization activities included: presentations at CBTU's legislative conference, as well as various provincial council and construction contractors' conferences. SkillPlan also presented at conferences serving teachers, school counselors, and practitioners in STEM and trades fields. Throughout Phase Two, SkillPlan staff also engaged in meetings and presentations with various groups and organizations, such as: the national Provincial Building Trades Directors of Training group; provincial and federal governments; employment services, newcomer, and youth-serving agencies; women in trades programs; supportive programs for Black Canadian and Indigenous peoples; and various secondary and postsecondary schools. This outreach increased the number of organizations (over 500 as of summer 2024) in the Build Your Skills Learning Hub network, champions who help promote resources among the groups they serve.

PHASE TWO EVALUATION ACTIVITIES

The overarching objective of the Phase Two evaluation was to assess the new and adapted virtual recruitment tools and resources. The evaluation approach focused on the core virtual recruitment resources, focusing on outcomes from national social media and advertising campaigns, Construction Trades Hub site engagement, and Learning Hub recruitment and activity. Table 1 provides a broad overview of the four objectives of Phase Two and describes how the evaluation assessed the degree to which the project met each objective.

Project objective	Evaluation objective	Data sources
Identify, prototype and test customized technology solutions and components for provincial and local construction industry needs	Assess the degree to which new and adapted tools meet the needs of stakeholders and users	Usability testing
Enhance the user experience pathways to improve the connection between project resources	Assess the usability of the new pathways across and within the various project components and the degree to which they support online users and partner network building	Usability testing, website analysis, Learning Hub analysis
Expand the repository of social media assets	Assess the performance of new social media assets and campaigns	Social media and advertising analysis
Engage underrepresented groups to optimize recruitment opportunities and provide resources to support their transition to the skilled trades sector	Assess how well the initiative targets underrepresented groups	Learning Hub analysis, social media and advertising analysis

Table 1 Project and evaluation objectives

SRDC collected and analyzed the following qualitative and quantitative data sources to evaluate Phase Two of the project:

• Social media analysis: as based on quantitative data, this analysis provided insight into how national and regional social media campaign content performed in terms of generating

increased awareness and engagement with virtual recruitment resources overall and through targeting specific underrepresented groups.

- Website analysis: as based on quantitative data, this analysis provided insight into the level and type of Construction Trades Hub site traffic, such as how users are referred to and engage with each provincial site.
- Learning Hub analysis: as based on quantitative data, this analysis provided insight into how users engaged with the Learning Hub. Along with platform usage data, intake survey data collected information on the demographic profile of Learning Hub users and their general feedback on how easy it was to navigate the learning resources, as well as the degree to which it met their needs.
- Usability testing: as based on qualitative data, this analysis provided insights into the functionality and usability of the updated Learning Hub and its division into three separate sections (i.e., the Explorer, Pre-Apprentice, and Apprentice hubs), each of which represent a step in the trades training journey.
- Interviews with organizations engaging with the Learning Hub: as based on qualitative data, this analysis showcased how a variety of organizations used the Learning Hub to provide trades training or support learners entering the trades.

PHASE TWO FINDINGS

SOCIAL MEDIA AND ADVERTISING OUTCOMES

Overall, advertising through social media and other online platforms is a key way to reach Canadian audiences online, with people "...increasingly using social filtering (i.e., things tweeted/posted by their friends/connections) as a means of discovering content...." (Kingsnorth, 2022, p. 154). As will be discussed in the following section, a key component of the Phase Two digital marketing strategy was advertising provincial Construction Trades Hub sites and Learning Hub resources through all major social media platforms in Canada. The project developed and implemented five advertising campaigns that targeted users in each province often using unique filtering criteria such as location, age, gender, and interests—and encouraged them to explore various resources on their provincial Construction Trades Hub site.

Along with these five main social media campaigns, other forms of paid and "organic" (i.e., unpaid) advertising was used throughout the project. Google search ads ran in the second half of Phase Two—that is, sponsored ads that appeared in search results after users inputted relevant keyword searches. The social media presence of provincial partners was further bolstered through the development of a depository of organic social media assets that they could use and adapt for their own social media marketing. Finally, many provincial partners also developed unique paid advertising campaigns to increase traffic to their Construction Trades Hub sites.

Overall, the virtual recruitment digital marketing approach became more advanced throughout Phase Two, with both organic and paid advertising campaigns running simultaneously across different platforms. The overall goal of these campaigns was threefold:

- 1. Enhance awareness of both provincial partners and the unionized skilled trades sector;
- 2. Increase traffic to each provincial Construction Trades Hub site; and
- 3. Grow the number of people using virtual recruitment resources.

The following section first discusses the provincial social media presence of partners and the campaigns they ran to increase the number of users visiting their provincial sites.¹ Next, the section examines the five major Phase Two campaigns that were created and managed by SkillPlan, covering both asset creation and findings.

¹ These local campaigns were not managed by SkillPlan and information about their overall development and performance is limited. However, they provide examples of how project partners have incorporated messaging about virtual recruitment resources into their own digital marketing strategies.

Contextualizing outcomes: Platform overview

By the start of 2024, an estimated 88.3 per cent of the Canadian population aged 18 or older were social media users, spending an average of 1 hour and 53 minutes on these platforms daily (Kemp, 2024). Given the large reach of these sites, the project primarily advertised on social media platforms to reach new users who may be interested in accessing virtual recruitment resources, learning more about the skilled construction trades, and connecting with unions. Phase Two of the project ran SkillPlan-managed paid campaigns on the following social media platforms, each of which varied in their audience size as of early 2024:

- **YouTube** had the largest number of users in Canada (31.9 million) by early 2024. The age profile of users varied, but the largest share was people aged 25 to 34. Like all platforms, not all users were active on a monthly basis and, among those that were, some may not see ads on the platform depending on their activity (e.g., viewing a profile page). Among people who had the Android app, Canadian users spent an average of 19 hours a month on YouTube in 2023 (Kemp, 2024).
- While **LinkedIn** does not publish information on active users, by early 2024, it had an estimated 24.0 million registered "members" in Canada. Those aged 25 to 34 were the largest share of their advertising audience. LinkedIn had lower usage in 2023 compared to other social media platforms in Canada, with the average time-in-app being less than one hour a month (Kemp, 2024).
- Facebook had 23.0 million users in Canada in early 2024, with the largest share being aged 25 to 34. While it had a smaller number of users compared to YouTube and LinkedIn, it was the most active social media platform in Canada in terms of app usage in 2023 (Kemp, 2024). It also had the highest per cent of web traffic referrals (e.g., share of web traffic arriving on other sites) compared to other social media platforms.
- Instagram closely follows Facebook in terms of size with an estimated 19.3 million Canadian users in early 2024. Instagram users tend to be younger, with those aged 18 to 24 making up the largest share of its advertising audience. The average Canadian user spent over 12 hours a month using the app in 2023 (Kemp, 2024).
- **TikTok** had an estimated 12.1 million users in Canada in early 2024 and, like Instagram, the largest share were aged 18 to 24. TikTok users are highly engaged and active on the platform, with the average Canadian user spending over 38 hours a month on the app in 2023 (Kemp, 2024).

Along with advertising on social media platforms, the project also ran paid search ads on Google. Across all search engine sites in 2023, an estimated 91.2 per cent of website traffic in Canada was referred by Google, with the next most popular search engine being Bing at 5.7 per cent. Unlike social media ads, which typically target users when they are casually browsing, these paid search ads target people when they are actively looking for related information. For example, someone who searched the term "construction training" or "skilled trades" saw a paid search ad linking them to their provincial Construction Trades Hub site.

Social media activity among partners

Adjacent to the SkillPlan managed paid social media and search campaigns, each provincial partner also engaged in social media outreach over the course of the project through organic and paid posts that shared information about virtual recruitment resources. Regional differences in social media outcomes—mainly, the number of Construction Trades Hub site users that were referred from a social media platform—are connected to partner variation in their use of organic and paid social media posts. In general, provincial partners who frequently posted about virtual recruitment resources and/or "boosted" posts engaged a greater number of new users.

What is a "boosted" or "promoted" social media post?

Facebook, Instagram, LinkedIn, and other social media sites typically offer users the opportunity to quickly transform a organic post into a type of paid advertisement to increase the number of users who see it (i.e., the number of impressions). When boosting a post, partners could select the audience they wanted the post to reach and their budget—typically less customized advertising options than what is available through an ad campaign manager.

Table 2 shows the social media accounts that partners had during Phase Two—although, their level of activity varied across platforms. Most partners had a Facebook, Instagram, and X/Twitter account, while a smaller number had LinkedIn, TikTok, and YouTube accounts. Typically, partners were most active on their Facebook accounts and least active on YouTube, although some partners were very active on X/Twitter and Instagram. From January 1, 2023 to March 31, 2024:

- BC Building Trades had 75 X/Twitter, 71 Instagram, 20 Facebook, 20 TikTok, and 3 YouTube posts.
- Building Trades of Alberta had 238 Facebook, 142 X/Twitter, 122 Instagram, 105 LinkedIn, 10 YouTube, and 7 TikTok posts.
- Saskatchewan Building Trades had 305 Facebook, 301 Instagram, 269 X/Twitter, 113 YouTube, and 19 TikTok posts.
- Manitoba Building Trades had 185 X/Twitter and 18 Facebook posts, as well as several on LinkedIn. Although they had an Instagram account, they did not create any posts during this period.

- Provincial Building and Construction Trades Council of Ontario had 1,017 Instagram (839 stories, 11 reels, and 167 posts), 253 X/Twitter, 202 Facebook, and 171 LinkedIn posts. Although they had a TikTok account, they did not create any posts during this period.
- Conseil Provincial du Québec des Métiers de la Construction had 30 Facebook and 9 Instagram posts. Although their overall number of posts was small, many of these posts were "boosted" to increase their reach.
- Nova Scotia Construction Sector Council had 233 Facebook, 131 LinkedIn, 94 X/Twitter, 81 Instagram, and 15 YouTube posts.
- New Brunswick's Building Trades Unions had 311 Facebook, 38 Instagram, 32 LinkedIn, and 10 X/Twitter posts.
- Trades NL: Building Trades of Newfoundland and Labrador had 307 X/Twitter, 296
 Facebook, 22 LinkedIn, and 16 YouTube posts.

	Pa	id ad accoun	its						
	Facebook	Instagram	X/Twitter	LinkedIn	TikTok	YouTube	Facebook Ads	Google Ads	TikTok Ads
National	1	1	√	1	✓	1	1	\checkmark	\checkmark
British Columbia	~	~	√		1	1	√		\checkmark
Alberta	\checkmark	✓	√	~	\checkmark	✓	√	\checkmark	
Saskatchewan	~	1	1		√	\checkmark	√	\checkmark	
Manitoba	1	✓	~	1		\checkmark			
Ontario	1	\checkmark	1	1	√		√	\checkmark	
Quebec	~	1					√		
Nova Scotia	1	\checkmark	~	\checkmark		\checkmark	√		
New Brunswick	\checkmark	~	\checkmark	\checkmark			1		
Newfoundland and Labrador	V		~	\checkmark		\checkmark			

Table 2 Regional variation in social media accounts

For most provincial partners, the majority of their organic social media posts were *not* about virtual recruitment resources but rather shared information about regional events, activities, and opportunities. Some partners, such as Provincial Building and Construction Trades Council of Ontario, had more frequent posts about their provincial sites throughout Phase Two. As the provincial Construction Trades Hubs outcome section will show, this activity greatly increased the number of new users who came through social media channels.

Compared to Phase One, more provincial partners established and used paid ad accounts, primarily through Facebook and Google ads. Ontario, Manitoba, and Quebec ran paid advertising

campaigns to drive traffic to their Construction Trades Hub sites throughout the project, while other regions had intermittent "boosted" ads and shorter campaigns.

As an example of a provincially managed paid social media campaign, Quebec ran paid advertising campaigns on Facebook throughout the project, which generated more than 6.4 million impressions and more than 488,000 clicks to their provincial site. Ontario had different social media campaigns on Facebook and Instagram that accumulated almost 2.3 million impressions and over 36,000 clicks to their site.

Supporting the provincial social media activity of partners

All provincial partners actively shared information about virtual recruitment resources on their social media accounts throughout Phase Two. To support this activity, U7 Solutions—a digital marketing company based in Ottawa—was contracted to create a repository of organic social media content (i.e., images, memes, videos, graphics) that provincial partners could adapt and use to promote the unionized construction trades sector more generally, as well as their provincial Construction Trades Hub site. As Figure 5 illustrates, pictures included an array of diverse skilled trades people and were purposefully selected to be realistic in style (i.e., not your typical stock photo). Along with images, U7 also generated a tutorial video on how to use the content.

Figure 5

Example of depository of organic social media content

THUMBNAIL DISPLAY					
FILE NAME	Heavy Equip Op - Melissa	Heavy Equip Op - General	Heavy Equip Op - General 2	Mechanics - Transport General	Mechanics - Transport Tristan
INSTAGRAM					
CAPTION	"We're very fortunate to live in a time where women and men are working together, learning from each other." - Amanda	If you love BIG machinery, skilled trades have got you covered. 😂	Ever wonder what are some of the responsibilities of an operating engineer? 1	Every day is different as a mechanic!	"The union was great. They pretty much helped me through my schooling, always made sure my hours were accounted
LINKEDIN			B 31.000 - 1 - 1		
CAPTION	"We're very fortunate to live in a time where women and men are working together, learning from each other." - Amanda	If you love BIG machinery, skilled trades have got you covered.	Ever wonder what are some of the responsibilities of an operating engineer?	Every day is different as a mechanic! 🞯 🖋	"The union was great. They pretty much helped me through my schooling, always made sure my hours were accounted
FACEBOOK					
CAPTION	"We're very fortunate to live in a time where women and men are working together, learning from each other." - Amanda	If you love BIG machinery, skilled trades have got you covered. 🔮	Ever wonder what are some of the responsibilities of an operating engineer? *	Every day is different as a mechanic!	"The union was great. They pretty much helped me through my schooling, always made sure my hours were accounted

Most provincial partners used and adapted the U7-created assets in 2023 to enrich their social media feeds. As all councils were active on Facebook, Table 3 describes some of the most popular posts made by provincial partners that shared information about virtual recruitment resources. Regional partners created a wide array of posts with unique features that promoted their provincial Construction Trades Hub sites and the unionized construction skilled trades.

On Canada's Building Trades Unions' Facebook page, one of the most popular posts was **a simple and clear text-only post** inviting people to visit the national Construction Trades Hub site and share information about it with their network. Other popular posts include an array of thumbnail images of people in different trades, as well as a video about women in the piping and welding trades—an asset that was created by U7.

On the BC's Facebook page, all three popular posts were developed by U7. A popular post aimed that was recruitment-focused described "*three great reasons to consider a career in the skilled trades.*" Notable elements of this post were 1) the **unambiguous call to action** (i.e., "*we've built the perfect online resource for you*") and 2) including **a hyperlink to the site at the top of the post**. Other posts also used graphics of skilled trades people with text that targeted users interested in becoming an apprentice and/or joining the unionized skilled trades sector.

For Alberta, one of the most popular posts advertising their site was a **custom-made video featuring diverse unionized trades people** (i.e., Indigenous peoples, women, newcomers, and racialized people) who spoke specifically about employment in the construction trades in Alberta. Building Trades of Alberta also used **memes** created by U7, with the Fresh Prince of Bel-Air meme receiving a large number of impressions (after being shared 42 times)—making it one of the most popular page posts during this period.

On Saskatchewan's Facebook page, the most popular post sharing information about their site featured a young girl in a hardhat headlined with the statement **"it's never too early to consider a career in the trades."** This post was boosted on Facebook to increase the number of impressions and has since been viewed over 72,000 times. The region also used U7-created assets to share information about specific trades. The first was an adapted video about ironworkers, and the second was an image of a concreate worker. **Posts about different trades** were a unique way to publicize their site without being repetitive, as well as showcasing different skilled trades they represent.

Table 3 High performing Facebook posts in each region



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	Post 1	Impress- ions	Clicks	Post 2	Impress- ions	Clicks	Post 3	Impress- ions	Clicks
Sask- atchewan	Statechevan Bulking Trades Laway 2	72,995*	120*	Saskatchewan Building Trades Public P	899	59	Skatchevan Building Trades Demostr 21. 2021 Tado scatchevan Building Trades Tado scatchevan Scathevan Scatchevan Scatchevan Scatchevan Scatchevan Scathe	705	47
Manitoba	Pin Product and the section of the s	228	16	The factor and the second of t	139	3	The Research of the set of the se	193	3
Ontario	March 1, 2023 • O Diniced #apprenticeship Navigator for opportunities in your area and start a #SkiledTrade togs:	960	23	References the action of a water for you action of a constraint of the action of the a	454	21	<text><text><text><text><text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text></text></text></text></text>	685	18

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	Post 1	Impress- ions	Clicks	Post 2	Impress- ions	Clicks	Post 3	Impress- ions	Clicks
Quebec	Image: A state of the stat	18,280*	2,496*		15,600*	2,044*	Analysis of the state of t	14,970*	1,963*
Nova Scotia	Calar Image:	366	3	Welcome to your Nova Scotia Construction Sector Council Construction Trades Hub Window of the state your council of the sector of the s	626	3	<text><text><text><text><text><text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text></text></text></text></text></text>	1,076	21
New Brunswick	New Brunswick's Building Trades Unions March 4 Common in Construction Week, from March 3rd to March 9th, 2024! It's a thrilling tim to honor the remarkable contributions of women in the construction industry. We are not only celebrating diversity and inclusion but also ignitting a spark in future generation of women to join the construction field. Isign up at the NBBTU Construction Trades Hub to find out where to start your career in the skiller traded: https://newbrunswick.constructiontradeshub.com/ #skilledtrades #freeresources #startyourcareer #skilledtradesreforall #NBBTU #uniontrades NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU NDBTU ND	5	201*	Provential function funct	5,596*	197*	New Brunswick's Building Trades Unions November 5-11.2023 in National Skilled Trades and Technology week! The New Brunswick's Building Trades Unions knows that Skilled Trades and Technology week! The New Brunswick's Building Trades Unions knows that Skilled Trades journey today! Viait our website to fin out how! Analocaliskilleritadesamictichologyweek! http://bblu.com/construction-trades-hub	6,578*	174*

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*Denotes organic posts that were later "boosted" on Facebook and became promoted posts. In most cases, we are unable to desegregate paid and organic impressions and clicks for these posts.

On Manitoba's Facebook page, the most popular posts linking to their site were a series of videos filmed with players from Winnipeg ICE Hockey Club who were testing "Try The Trades" excavator, welding, and other simulators in an exhibition hall. These posts emphasized **experiential exploration of trades.** The third most popular post was a video with skilled trades people giving **testimonials** on the benefits of unionized mentorship.

On Ontario's Facebook page, the top three posts publicizing their Trades Hub were simple graphic posts that targeted users looking for apprenticeship opportunities, posts that **clearly stated the intended audience**. All three posts shared information about one of their custom site features—the apprenticeship navigator, which will be discuss further below—and included **open-ended questions** (i.e., "ready to apply for your apprenticeship?").

Quebec did not use U7-created assets but rather created their own content to publicize their site. The most popular posts were boosted to increase the number of social media impressions. All three video posts featured **real trades people discussing their specific trade** and included a caption that linked to a specific trades page. The posts also included a statement that let people know that they will **find trades access support on the site**.

On Nova Scotia's Facebook page, the first two popular posts sharing information about their site were **website tour videos** that quickly scrolled down site pages without any sound. Post text emphasized the range of resources offered and included a clause that "*It's 100% free for anyone to use*." Another popular post **used a newsclip** from a CBC article discussing the increasing number of people registering for apprenticeships in order to share information about their site.

On New Brunswick's Facebook page, two boosted graphic posts shared information about their site as part of Women in Construction week and National Skilled Trades and Technology week. Both are examples of how partners could **include a link to their site even when a post did not directly discuss what resources are offered**. The second post more directly discussed the site, describing it as a "gateway for those looking to enter the skilled trades." Both the second and third post included links to an information page on New Brunswick's site rather than directly to the provincial Construction Trades Hub site itself.

On Newfoundland and Labrador's Facebook page, the most popular posts that included information about or links to their site featured information about women in the skilled trades, campus and training institutes across the province, and the benefits of a career in the construction trades (i.e., "more flexibility than a desk job"). Two of these posts included the **headline question "Did you know?"** to increase engagement.

Overall performance of SkillPlan-led advertising campaigns

Along with organic and boosted social media content managed by provincial partners, five advertising campaigns were completed over Phase Two. These campaigns were managed by SkillPlan with the support of U7. Campaigns one and two were active in spring 2023, while campaigns three, four, and five were active in late 2023 and early 2024. Each campaign had a unique focus:

- Campaign one ran paid ads on Facebook, Instagram, YouTube, and TikTok from the start of March to the end of May 2023. It used a range of video and graphic ads to increase site traffic to the national Construction Trades Hub site with content that targeted youth, women, newcomers, and anyone looking to explore the trades.
- Campaign two ran paid ads on LinkedIn, Facebook, Instagram, YouTube, and TikTok from the start of March to the end of May 2023. It used video, graphic, and carousel ads to drive traffic to the Learning Hub information page on English-language provincial Construction Trades Hub sites active at that time.
- Campaign three ran paid ads on LinkedIn, Facebook, Instagram, YouTube, and TikTok in October 2023. It used video, graphic, and carousel ads to drive traffic to group-specific landing pages on provincial Construction Trades Hub sites that targeted youth, newcomers, and women.
- Campaign four ran paid ads on LinkedIn, Facebook, Instagram, YouTube, TikTok, and Google during November and December 2023. It used video, graphic, and carousel ads to drive traffic to provincial Construction Trades Hub Learning Hub information pages. Paid search ads on Google helped drive additional traffic to each site.
- Campaign five ran paid ads on LinkedIn, Facebook, Instagram, TikTok, YouTube, and Google in December 2023 and January 2024. It used video, graphic, carousel, and web search ads to drive traffic to the Union page on English-language provincial Construction Trades Hub sites that included this feature.

Overall, a large number of social media and/or Google users saw a campaign advertisement (**impressions**), viewed a video (**video views**), and clicked on an ad (**clicks**). Across all social media and advertising platforms, these campaigns generated almost 33 million impressions (i.e., the number of times an ad loaded onto a screen). Among those who viewed a social media ad, over 348,000 users clicked on an ad.

As shown in Table 4, the number of clicks, which refers to how many social media users saw an ad and clicked on it, was highest on TikTok across most campaigns. A number of users also saw
and clicked on Facebook, Instagram, YouTube ads. In comparison, overall impressions and clicks were lower on LinkedIn.

	Campaign 1		Campaign 2		Campaign 3		Campaign 4		Campaign 5	
	Impress- ions	Clicks								
Facebook/Instagram ¹	2.02 M	5,942	163 K	2,156	1.14 M	31,432	762 K	12,274	822 K	13,130
YouTube	310 M	4,007	1.04 M	14,179	2.56 M	45,497	1.34 M	32,336	1.33 M	24,434
LinkedIn	852 K	665	292 K	755	401 K	3,509	959 K	4,564	300 K	1,500
TikTok	1.09 M	6,418	2.72 M	14,445	4.17 M	39,044	3.29 M	42,848	4.46 M	42,755
Google search	-	-	-	-	•		110 K	4,704	62 K	1,737

Table 4 Overall campaign results by platform

¹ Due to how Meta structures their ad accounts, we were unable to access disaggregated Facebook and Instagram metrics.

TikTok's Pangle advertising network—which displays ads outside of the TikTok platform mainly on cell phone apps—was also used in campaigns one and two. However, a high click-through-rate (e.g., over 50 per cent) led us to infer that this means of advertising resulted in a high level of bot traffic, with third-party advertisers being likely to use bot clicks to increase their ad revenue. While it is excluded from the social media analysis below, we were unable to exclude it from the Construction Trades Hub outcome analysis.

Paid campaign one: Increasing national awareness of the construction trades

Overview

Running from early March to the end of May 2023, the project implemented the first national paid social media campaign on Facebook, Instagram, YouTube, and TikTok using Canada's Building Trades Unions accounts. The campaign used video content across all social media platforms and posted graphic content on Facebook, Instagram, and LinkedIn.

The aims of the first paid social media campaign were two-fold: from March to April, ads were optimized to drive traffic to the national Construction Trades Hub site; then from April to May, the same assets were used in an awareness campaign that aimed to increase interest in the construction trades industry. Assets did not direct users to perform certain actions (e.g., visit a

site) but instead used phrases that aimed to raise general interest in a skilled trades career. All ads included a clickable link to the national Construction Trades Hub site.

Campaign one assets aligned with one of four themes: youth, women, diversity, and general. As shown in Figure 6, youth campaign content targeted younger recruits by emphasizing tuition support, on-the-job training, and that no previous experience was necessary. Certain posts also included text that targeted recent graduates (e.g., "consider a different classroom").

Figure 6 Example of youth campaign content



As shown in Figure 7, campaign content targeting women included "myth-busting" text that communicated support for women in the skilled trades. It also included more general phrases (e.g., "have you got the skills?") overlaid on images of women.



As the examples in Figure 8 show, diverse campaign content directly targeted newcomers—both to Canada and to the sector—and invited them to consider a skilled trades career in the unionized construction industry. For example, some content targeted people considering a career change with messages such as "look at the unionized skilled trades for your next career move." This campaign theme also included more general content that emphasized "a place for everyone in the unionized skilled trades."



As shown in Figure 9, general campaign content included messaging that invited viewers to "kickstart" or "discover" their career in the skilled trades, as well as messaging that highlighted support with education and job placements. As the ad on the right-hand side illustrates, certain graphics highlighted explicit support from the unionized skilled trades sector.



Examples of general campaign content



Across all four campaign themes, most videos included the messages "earn while you learn," "hands-on learning," "access to grants," "mentorship program," "rewarding work," and "start your career in the unionized skilled trades today." In many cases, video content was not completely distinct across the four campaign themes, but rather relayed similar messages with different images and hooks that were specific to youth, women, and diversity.

Performance

Organized by each of the four campaign topic areas, we next report on the performance of each individual ad through three metrics: impressions, video views, and clicks. **Impressions** count how many times a platform displayed an ad, typically within a user's personal feed. For video content, impressions count the number of times a social media platform loaded a video onto a feed, often regardless of if a user clicked or paused to watch it. To provide more insight into engagement with video content, we also report the number of **video views**. The **clicks** metric counts the number of times a user clicked on the ad, which typically directed them to the national Construction Trades Hub site in campaign one.

Youth campaign performance

Figure 10 presents the number of impressions across the youth campaign ads. On Facebook/Instagram, graphs performed much better than video assets, with the "benefit two graphic" (which shows a young woman in a hard hat and safety goggles) having the highest number of impressions. Messaging on this ad highlighted "tuition support, on-the-job training, and no previous experience required." On LinkedIn, the number of impressions was comparably lower, with video three having the highest number overall.

On TikTok, video two performed the best in terms of impressions. In contrast, this video had the lowest impressions on other platforms compared to the other two videos. On YouTube, video one had the highest number of impressions.

How are video views counted?

For video assets, the number of impressions is much larger than video views across all platforms, which requires a user to engage with the video ad in some way (e.g., pause to watch it for a certain number of seconds). Though the intent of this measure is to generate insight into longer engagement than just an impression, how video views are counted varies by each social media platform:

- The Facebook/Instagram view metric counts the number of times a video starts to play;
- The YouTube view metric counts the number of times a user watched until the end of the video;
- The TikTok view metric counts how many times a user watched at least 50 per cent of a video; and
- The LinkedIn view metric counts how many times a user watched two or more continuous seconds of playback.



Figure 10 Impressions across youth campaign assets

For the youth campaign metrics in Figure 11, YouTube performed the best in terms of video views, especially for video one. This is notable as, on YouTube, a video view is only counted if a user reaches the end of the video—a more difficult threshold to meet compared to the count metrics for the other platforms. On Facebook, Instagram, and LinkedIn, video three had the highest number of views. All three videos had similar view counts on TikTok (a metric that was only counted if a user paused to watch at least half of the video).



Just as there was large variation in impressions and video views, Figure 12 shows that the number of times a user clicked on an ad varied considerably across platforms. Overall, the number of clicks across most assets was low on LinkedIn-although ad settings were aimed at increasing awareness rather than click-throughs for much of this campaign.



Clicks across youth campaign assets

In contrast, the "benefit" graphic four (shown on the left-hand side of Figure 6 above) received over 1,000 clicks on Facebook and Instagram. Just as video one had a high number of views on YouTube, it received the greatest number of clicks across the video content. However, when combining metrics across all three videos, TikTok performed well in driving traffic to the Trades Hub national page.

Women campaign performance

Figures 13, 14, and 15 display the same ad performance metrics across the women campaign content. The number of impressions ranged widely and-like the youth campaign content-was typically lower for videos compared to graphics on Facebook and Instagram. The "myth vs. fact" graph (shown on the left-hand side of Figure 7) performed the best on Facebook and Instagram in leading users to visit the national Construction Trades Hub site.

Video three received the highest number of impressions on LinkedIn and Facebook, resulting in over 5,500 video views across both platforms, while the "non-gender specific" graph had the

highest number of impressions on Facebook, Instagram, and LinkedIn among the graphic content. However, the number of clicks for this graphic was only 39 on LinkedIn and 103 on Facebook and Instagram.



In contrast to the other platforms, women campaign video assets received more impressions, views, and clicks on both TikTok and YouTube. In particular, there was large variation in the performance of the women campaign videos on TikTok, with video two receiving far more impressions, views, and clicks compared to the other videos.

Why do impressions vary across each asset/ad?

The number of impressions (which often drives views and clicks) are subject to a social media's recommendation/algorithm system that decides what content appears for a user. It is typically based on both a user's prior engagement on the platform and what content has performed well for other users. In Figure 12, it is likely that TikTok's algorithm drove the difference in video impressions and engagement across the three women campaign videos.

As social media companies do not release their algorithm publicly, we are unable to report why a particular ad performed better than others. We can only speculate on what ad features might have increased the number of impressions. For example, video two had heavy metal background music that may have made an impression on users and increased the likelihood that they paused for a greater length of time to watch the video. A social media algorithm would then pick up this engagement and show the ad to a greater number of users.



On YouTube, video one received the highest number of impressions and clicks, although video two had the highest number of views. The YouTube results also show that a greater number of views does not automatically result in more clicks. That is, certain assets were more successful in spreading messaging, while others were more successful in inviting users to leave the social media platform and visit the national Trade Hub site.



Diversity campaign performance

Figures 16, 17, and 18 report the same per-asset outcomes for the diversity campaign. The "career move" graphic (shown on the left-hand side of Figure 8) had the highest number of clicks and impressions on Facebook and Instagram. Of note, this graphic did not show images of people but rather included messaging targeting those who are considering a career move. The "new to Canada" graphic one (shown on the right-hand side of Figure 8) also performed well in terms of the number of clicks it attracted through Facebook and Instagram. Both ads had comparably lower impressions and clicks on LinkedIn.

Across the diversity video assets, video three had the highest number of impressions, views, and clicks on YouTube. On TikTok, video two again had the highest number of impressions, views, and clicks. This video—which directly targeted newcomers, beginning with the question "are you a newcomer to Canada looking for a new career?"—also performed the best on Facebook and Instagram in terms of impressions and views, but only resulted in a small number of clicks from these platforms.



Figure 16 Impressions across diversity campaign assets



Figure 17 Video views across diversity campaign assets





General campaign performance

Figures 19, 20, and 21 describe the same performance metrics across the general campaign ads. While the "union help graphic" (shown on the right-hand side of Figure 9) had the highest number of impressions on Facebook and Instagram, the "office views" graphic (shown on the left-hand side of Figure 9) received the most clicks from both these platforms and LinkedIn. Like the highest performing diversity ad, this asset spoke to people who might be considering a career change.

General campaign video two had the highest number of impressions, video views, and clicks on TikTok. This video began with the text "make the unionized skilled trades your next career move," a phrase that also mirrors graphics that performed well on Facebook and Instagram. It also received a high number of views on YouTube, although video three performed slightly better in generating clicks on this platform.









Paid campaign two: Increasing traffic to the Learning Hub

Overview

Running in May 2023, the second paid social media campaign focused on driving traffic to each provincial site's Learning Hub sign-up page. Other than Quebec, which was running its own paid social campaign at the time, all regions with active sites at that time were part of campaign two.

As in the first campaign, ads ran on Facebook, Instagram, YouTube, TikTok, and LinkedIn. While the campaign targeted users provincially, ads came from national CBTU social media accounts rather than provincial social media accounts. By region, each platform redirected users who clicked on an ad to their provincial Learning Hub sign-up page. The campaign used video content across all five social media platforms and graphic content on Facebook, Instagram, and LinkedIn, which also ran carousel ads.

Campaign two assets did not directly target underrepresented groups—although images and graphs did feature diverse tradespeople. Like the previous campaign, assets did not differ by region. Rather, the campaign used more general ads that targeted people who may be interested in starting a skilled trades career, as well as those already in pre-apprenticeship or apprenticeship training. Among the graphics, certain ads did not provide information about the Learning Hub, but rather presented open-ended questions and general statements, such as those in Figure 22.

Figure 22 Campaign two graphics that did not showcase the Learning Hub



Other campaign two assets used prompts and images that highlighted Learning Hub resources and tools, with statements such as "free video tutorials" and "easy-to-follow online lessons" (see Figure 23). These graphics used animations rather than photos. Unlike campaign one, this type of ad content directly invited a user to click on the ad to "join" or "create an account."

Figure 23 Campaign two graphics that did showcase the Learning Hub



Carousels and videos replicated the animation graphics in terms of style, images, and wording. These types of ads directly invited users to "check out the Learning Hub" and showcased the type of resources available, with statements such as:

- "centralized resources to support your career in construction,"
- "build your skills in math, science, reading and more,"
- "prepare for your Red Seal with video tutorials and mock tests," and
- "practical learning resources to support you on the job site."

Certain carousels and videos targeted people who were already enrolled in an apprenticeship, while others aimed to attract people who may be considering a career in the skilled trades.

Performance

Across most social media platforms in campaign two, video content received the highest number of impressions in Figure 24. In particular, videos received a high number of impressions on TikTok and YouTube, with video one having the highest number of impressions overall. This animated video began with a woman sitting at a desk under the text "Gearing up for the skilled trades?" It then went on to introduce the Learning Hub and the resources it provides, such as "Access trade-specific prep guides" and "assess your skills with mock tests." It ended with the invitation to "Create an account today!"



Figure 24 Campaign two asset impressions by platform

Carousels typically had a higher number of impressions than graphic posts on Facebook, Instagram, and LinkedIn. As an example of this content, carousel two directly targeted apprentices, beginning with the statement "Are you an apprentice in the unionized skilled trades?" The next image invited these people to "Check out the Learning Hub," while additional images provided an overview of the resources it provides.

In terms of graphic content, the "where to start" graphic had a comparably high number of impressions compared to the other graphic ads (shown on the right-hand side of Figure 22). In addition, the "consider apprenticeship" graphic (shown on the left-hand side of Figure 22) also performed well in terms of overall impressions.

While video one had the most impressions in campaign two, the actual rate of watching (at least a portion) of the video was more evenly distributed (see above for description of how video views are counted across each platform). On YouTube, video views were highest, which can be expected as the other platforms tend to promote more browsing-type behaviour. In contrast, prolonged video engagement was notably low on LinkedIn and TikTok.



Figure 25 Campaign two video views by platform

Overall, YouTube and TikTok were more successful in driving traffic to the Learning Hub signup pages, with the number of clicks typically lower on the other platforms (see Figure 26). While video one had the highest number of impressions, video four performed well in driving traffic to the Learning Hub sign-up page in terms of the number of clicks relative to impressions. This video began with the questions "gearing up to enter the skilled trades? Already in an apprenticeship?" and then invited people to build their skills using the Learning Hub.



Carousel two (described above) also had a higher number of clicks relative to the other carousel assets—clicks that were largely driven by traffic on Facebook and Instagram. Like video four, it targeted both people who were looking to enter an apprenticeship as well as those already active as an apprentice.

Across the graphic assets, the "where to start" and "consider an apprenticeship" graphs performed the best in terms of number of clicks. Notably, both these graphs (which are featured in Figure 22) did not showcase the Learning Hub directly but were more general in focus (e.g., featuring open-ended statements overlayed on pictures of trades people).

Paid campaign three: Targeting women, newcomers, and youth

Overview

In October 2023, the third advertising campaign specifically targeted newcomers, women, and youth through creating landing pages for each of these three groups on all provincial Construction Trades Hub sites. The campaign then used graphic, video, and carousel ads that drove traffic to these provincial landing pages. Like the previous campaigns, social media ads ran on Facebook, Instagram, LinkedIn, TikTok, and YouTube.

The group-specific landing pages targeted newcomers, women, and youth who were exploring the trades as a potential career path. As Figures 27, 28, and 29 show, each landing page had a headline crafted for the specific target group; for example, the newcomer headline on the Ontario page read "Are you new to Canada and looking for a career? The unionized skilled trades can help!"

Landing pages also had a short 18 second video featuring diverse skilled trades people at work at the top of the page. While this video was the same on each group-specific landing page, it had a different thumbnail image (i.e., the still image visible before a user clicks on it) aligning with the target group for that page.

The text content on each landing page was also uniquely developed for the target group; for example, the youth page emphasized earnings, debt-free learning, flexibility, and mentorship. Further down each page, trades icons directed users to further information about specific trades—a layout that was intended to mirror the main homepage for the provincial Construction Trades Hub site.



Are you new to Canada and looking for a career?

The unionized skilled trades can help!

You've got the skills. The Building Trades Unions can help you put them to work.

- · Combine your education and experience into lucrative and
- rewarding work
 Get support with training and job placements
 Gain access to financial grants
- Make great money

Figure 29

Get hands-on learning
 Earn while you learn





To draw traffic to these landing pages, U7 created social media assets targeting these three groups. Figure 30 shows three graphic examples of ads targeting women. Like campaign one, some ad clauses were "myth-busting" in approach to emphasize that women belong and are welcome in the skilled trades. Other video and carousel assets also included motivational text such as "Elevate ambitions," "Construct your dreams," and "Build on your unique strengths." To lower the overall cost of the campaign, some content from previous campaigns were used in the campaign three video assets.

Figure 30 Examples of graphics targeting women



Figure 31 shows examples of graphic posts aimed at recruiting newcomers. Like some of the diversity-focused content in campaign one, these ads featured text addressing people "new to Canada" or looking to "build a life in Canada." Video content also featured women and men at work in the skilled trades with motivational messages (e.g., "The skilled trades can help you build a career to be proud of"). Carousel ads were more text heavy than graphic and video content, outlining the benefits of a skilled trades career path (e.g., "Translate your education and experience into lucrative and rewarding work").

Figure 31

Examples of graphics targeting newcomers





Are you new to Canada and looking for a career? The unionized skilled trades can help!



The examples of youth-focused graphic ads in Figure 32 highlight how messaging was adapted for people leaving high school (i.e., "graduating to new possibilities") and starting their careers. Carousel and video ads also emphasized that people could enter the skilled trades with "no previous experience required" and would receive "help with education and job placements." Like the videos targeting women and newcomers, youth-focus videos featured men and women working in a variety of skilled trades. For example, one featured images of crane operators with overlaid text that read "Take your career to new heights."

Figure 32 Examples of graphics targeting youth



Performance

Women campaign performance

Figure 33 shows the overall number of impressions for the women-focused ads used in campaign three. As video ads were present across five platforms, they received the greatest number of impressions. On Facebook and Instagram, video five had the highest impressions, a video with upbeat music that began with the statements "Myth: women don't belong in the skilled trades; fact: women belong anywhere they want" overlaid on images of women working in the trades. Video four received the most impressions on TikTok, a video that was similar to video five but began with the statement "The skilled trades aren't gender-specific." On YouTube, video two had the most impressions, a shorter video with the same images and upbeat music as the others, but beginning with the statement "Are you ready to crush stereotypes?"

While carousel ads had comparably fewer impressions, two graphic ads received a high number of impressions. Graphic three (shown in the middle of Figure 30) and graphic five (which also had the statement "The skilled trades are not gender-specific") had large impression counts relative to the other graphic ads. These results show that graphic ads—which are typically less expensive and time consuming to create—can reach a wide number of people.



Figure 33 Impressions across women campaign assets

Largely driven by the high number of views on Facebook and Instagram, Figure 34 shows that video five had the greatest number of engaged views, almost 20,000 more than the other videos. While video four had a high number of impressions on TikTok, only a small portion of users paused to watch at least half of the video. Likewise, video two was popular on YouTube, but only a fraction completed the video entirely.



Although not all users watched a video to the end, many still clicked on a video ad to visit the landing page targeting women. Figure 35 illustrates the number of clicks each asset received across all five social media platforms. Largely boosted by TikTok traffic, video four had the greatest number of clicks, while video five and two performed well on Facebook, Instagram, and YouTube. Graphics three and five also received thousands of clicks from Facebook and Instagram users. Overall, the number of clicks from LinkedIn was low, although carousel ads tended to attract more traffic to sites on this platform compared to the other asset types.



Newcomer campaign performance

For the campaign three ads targeting newcomers, video assets had the largest number of impressions. Video one was popular on TikTok, a 16 second video featuring diverse tradespeople working and the lead statements "Create your success in Canada" and "Work with amazing mentors." On YouTube, LinkedIn, Facebook, and Instagram, video five had a large number of impressions. This 13 second video had dramatic music and began with a series of questions and statements overlayed on moving images of a construction job site: "new to Canada and looking for a career? You've got the skills. The Building Trades Unions can help you put them to work."

Graphics four and two also received a comparably larger number of impressions on Facebook and Instagram. Graphic four (shown on the right-hand side of Figure 31) included the statement "Are you new to Canada and looking for a career?" Graphic two had another image of a man with the statement "Earn while you learn. No experience required." On LinkedIn carousel one received a large number of impressions compared to similar assets, which also began with the statement "New to Canada and looking for a career?"



Figure 36 Impressions across newcomer campaign assets

For the campaign three newcomer videos, video five received the most engaged views across all platforms-the video that also had a large number of impressions on YouTube, LinkedIn, Facebook, and Instagram. On YouTube, video three also received a larger number of engaged views, a 12 second video that began with the statement "Are you new to Canada and looking for a career?" over images of diverse trades people on a job site.



Figure 37 Video views across newcomer campaign assets

Figure 38 show the number of clicks each campaign three newcomer asset received across all five platforms. In general, ads with a higher number of impressions received more clicks. On Facebook and Instagram, graphic two was notably successful in driving traffic to the sites, although graphic four and video five also performed well on these two platforms. On LinkedIn, both video five and the carousel ads drove traffic to the sites, but the number of clicks overall were lower compared to other platforms. On TikTok, video one received the highest number of clicks, while on YouTube, video three had the most.



Youth campaign performance

Figure 39 illustrates the number of impressions youth-focus assets received in campaign three. Video three had an extremely high count on TikTok, surpassing over 1.2 million impressions. This video had R&B backdrop music and began with the statement "Take your career to new heights" overlaid on images of a construction site with a large crane. On YouTube, video five had the most impressions, while on Facebook, Instagram, and LinkedIn, graphic five had the most. Graphic five featured a woman in a hard hat with the statement "Earn while you learn on your way to a great career." Other graphic and carousel ads received comparably fewer impressions.



Just as video three had a high number of impressions on TikTok, it also received the greatest number of engaged video views, reaching almost 20,000 views across all social media platforms. Videos five, four, and three also had a high number of views on YouTube, with video one and two receiving fewer views on this platform. Video five also had a large number of engaged views on Facebook and Instagram where it also had greater reach. On LinkedIn, video two had the highest number of engaged views, surpassing the number of views received on Facebook and Instagram.



Figure 40 Video views across youth campaign assets

With a higher number of impressions and engaged views, video three received over 15,000 clicks to provincial sites, with traffic coming almost exclusively from TikTok and YouTube. However, all five youth-focused videos that ran on YouTube drove traffic to provincial sites. On Facebook and Instagram, graphic five and four received a large number of clicks-graphics that also had more impressions on these platforms compared to the other graphic assets.



Paid campaign four: Increasing traffic to the Learning Hub

Overview

With a focus on how Learning Hub resources could support people interested in starting a career in the skilled construction industry, the fourth advertising campaign ran for 30 days between November and December 2023. Both text, images, and video content were consistent with campaign two, although new assets were created and messaging was updated to avoid repetition. The campaign ran ads on Facebook, Instagram, LinkedIn, TikTok, and YouTube and drove traffic to the Learning Hub information page on each provincial site. Like campaign two and three, users were directed to their provincial site depending on where they were located when they clicked on the ad.

Unlike the previous campaigns, campaign four also included paid search ads on Google. Differing from social media ads, each individual user saw slightly different ad content on Google depending on their keyword search and user profile. The ad content was assembled from various phrases decided on in the campaign development phase, such as "Build Your Skills" and "Discover a Career in Trades." Figure 42 illustrates an example of a paid search ad a user may have seen.

Figure 42 Example of paid search ads used in campaign four



Some of the social media assets used in campaign four targeted people who were looking to start a skilled trade career while others were more skill-focused and/or directly publicized the Learning Hub. Figure 43 provides examples of the skill-focused graphic ads, which invited people to test their skills and get ready for a trades career. The beginning of each video ad also included similar messaging (e.g., "Do you have what it takes?") overlayed on people working in the trades. Videos then transitioned to images of the Learning Hub and listed resources it offered.

Figure 43 Example of skill-focused ads



As shown in Figure 44, other ads were more recruitment-focused with general messaging, such as "Looking to start a career in the skilled construction trades?" and "Do you have what it takes for a career in construction?" Some ads also characterized the Learning Hub as a resource for people who were "Not sure where to start." Carousel ads that began with recruitment-focused messaging led to more specific content about the Learning Hub, with each card describing a specific resource it offered (e.g., instructional videos; learning in math, science, and reading; and assessments).

Figure 44

Example of recruitment-focused ads



skilled construction trades?

Interested in a career in construction, but not sure where to start?

Check out the Build Your Skills Learning Hub \rightarrow



Performance

Social media advertising

In Campaign four, video assets received the highest number of impressions as they were implemented across a greater number of platforms. One video, video A5, had an extremely high number of impressions (over 2.5 million) driven by activity on TikTok. This 29 second video

with upbeat music began with the question and statement "is a career in construction right for you? Find out with the Build Your Skills Learning Hub." Another video, video A4 also received many impressions on Facebook, Instagram, and YouTube. This video used the same music and format as video A5, but began with the statement "Do you want to work in the skilled construction trades? Kick-start your career with the Build Your Skills Learning Hub."

While carousel and graphic assets had fewer impressions, some were more successful than others. The "all you need" graphic B5—which featured a man in a hard hat with the statement "all you need to succeed in the skilled construction trades"—had a large number of impressions. This ad might have appealed to a wide audience as it was not specific to explorers, pre-apprentices, or apprentices. On LinkedIn, the "what it takes" graphic A5 (see the right-hand image in Figure 40) also received a large number of impressions compared to other ads that ran on the platform.



Figure 45 Campaign four asset impressions by platform



Figure 46 Campaign four video views by platform

Although video A5 had an extremely high number of impressions on TikTok, few users engaged with at least half of the video (e.g., ~14 seconds). All other videos also had low video engagement rates on TikTok, although this may have been due to the longer length of these videos compared to previous campaigns where videos were typically shorter.

On YouTube, video A2 received the greatest number of engaged views, a video that began with the question "considering an apprenticeship in the skilled construction trades?" and featured a drywaller worker working on a job site. On Facebook, Instagram, and LinkedIn, video A4 had the most engaged views—an asset that also had a high number of impressions.

Although video A5 had lower overall engagement on TikTok—at least in terms of watching at least half of the video—it still generated over 30,000 clicks to provincial sites. Almost all video assets also performed well on YouTube in terms of generating clicks to provincial sites. On Facebook and Instagram, videos A4 and B3 generated a high number of clicks, as did the "all you need" graphic B5. On LinkedIn, the "what it takes" graphic A5 had the greatest number of clicks on that platform.



Figure 47 Campaign four asset clicks by platform

Paid search advertising

Figure 48 shows the number of impressions and clicks for the campaign four paid search ads by province. The number of impressions—that is, the number of times the ad was loaded onto a user's screen—was lowest in Newfoundland and Labrador (n=3,403) and highest in Ontario (n=20,161). The number of impressions may have varied provincially due to the number of users in each province using relevant search terms during this period, as well as the level of competition with other organizations who were also running paid search ads.

In terms of the number of users who clicked on an ad, it was lowest in Newfoundland and Labrador (n=277) and highest in Quebec (n=954). In particular, the number of clicks relative to the number of impressions was much higher in Quebec compared to the other regions. Across all regions, this paid search campaign resulted in 4,704 clicks to the provincial sites, a number that was similar to the clicks generated from LinkedIn ads. However, the number of clicks relative to impressions was much higher for the paid search ads as LinkedIn had nine times more impressions.



Figure 48 Paid search ads clicks and impressions by region

Overview

Campaign five developed assets that publicized the benefits of joining a union and drove traffic to union information pages located on each provincial Construction Trades Hub site. All regions were part of the ad campaign other than Nova Scotia and Quebec. It ran paid ads on multiple social media platforms (i.e., Facebook, Instagram, LinkedIn, YouTube, and TikTok), as well as paid Google search ads, for 30 days between December 2023 and January 2024.

Prior to the start of this campaign, union-information pages on the provincial sites that included this feature were updated to include a sign-up form for users who were interested in learning more about how to connect with local unions or begin an apprenticeship (See Figure 49). When a user inputted information into this form, their contact information was sent to SkillPlan and/or the provincial partner for further follow-up. Over the course of the campaign 245 people completed these forms.

Paid campaign five: Increasing traffic to the union-information pages

	a local union	rssful career!					
Your Name *		I would like to:					
Name		Connect to available construction job opportunities with a					
Your Email • Email address		local union Receive information about getting into an apprenticeship a					
		union training school					
Your phone number *		Submit					

Figure 50 provides an example of the type of paid search ad a user might have viewed, although the content changed depending on their keyword search and user profile. For example, if a user included "electrician" in their search, then the ad would specifically mention the electrical union in their region.

Figure 50 Example of paid search ads used in campaign five



On social media platforms, graphic, video, and carousel assets designed by U7 emphasized the multiple benefits of joining a union. Some ads, such as those in Figure 51, used a list-style approach to highlight the advantages of joining a union, reasons that included "high job satisfaction" and "excellent pay, pension and benefits." Video and carousel content also included similar messaging, such as one video (i.e., video 2) that began with "5 reasons you should consider joining a union as a skilled construction tradesperson" (see the last graphic in Figure 51). These campaign assets did not specifically target pre-apprentices and explorers and may have appealed to current apprentices and even red seal journeypersons not yet working in the unionized sector.

Figure 51 Examples of list-style graphic ads



Along with list-style ads, campaign five also included simpler, less text-heavy assets that publicized a single key reason why a person should consider joining a union. As the examples in Figure 52 illustrate, these ads each listed a key reason why a union should consider joining a union, including: "Learn from the best trained and highest-quality workers," "A union can support your career," and "It pays to be part of a union." This approach was only taken in graphic ads as video and carousel assets all took the "list-style" approach.

Figure 52 Examples of "key reason" graphic ads





Connect to a construction union in your region

Performance

Social media advertising

Like the previous campaign, video ads had the highest number of impressions—largely driven by TikTok activity. Video five had over 2.5 million impressions alone, a 25 second video that began with the question and statement "Interested in the skilled construction trades? Joining a union is

a great way to elevate your career..." On Facebook and Instagram, several of the other carousel and graphic ads also had higher impression counts compared to the other non-video ads. They include "list graphic 2" (see the middle image in Figure 51) and "best trained graphic 4" (see the left-hand side of Figure 52)



Like the previous campaigns, engaged video views were lower than impressions, especially on TikTok. Corresponding to the number of impressions, video five had the most engaged views—an asset that also received over 30,000 clicks to provincial sites. On Facebook and Instagram, video one had the most engaged views and received the greatest number of clicks on across these platforms. This 34 second video begins with the statement "joining a union can support you in a successful career within the skilled construction trades" and then lists the benefits of joining a union. Finally, across this type of asset, carousel two had the greatest number of clicks on Facebook, Instagram, and LinkedIn.

Figure 53


Paid search advertising

Figure 56 shows the number of impressions and clicks for the campaign three paid search ads in the region where these ads ran. The number of impressions—that is, the number of times the ad was loaded onto a user's screen—was lowest in Newfoundland and Labrador (n=1,640) and highest in Ontario and Manitoba, which each received over 16,000 impressions.

In terms of the number of users who clicked on an ad, it was lowest in Newfoundland and Labrador (n=116), where fewer people saw an ad, and highest in Ontario (n=646). The number of clicks relative to the number of impressions was higher in British Columbia, but lower in Manitoba and Alberta. Across all regions, this paid search campaign resulted in 1,737 clicks to the provincial sites, which was lower than campaign four where ads ran in a greater number of regions.



NATIONAL AND PROVINICAL CONSTRUCTION TRADES HUB OUTCOMES

In the following section, we describe user engagement with the national and provincial Construction Trades Hub sites from January 1, 2023 to March 31, 2024. Users came to each site from a range of sources, from clicking on a paid social media ad or organic social media posts, as well as after searching online or on other trades-related websites that included a link to a site. Along with describing user acquisition, this section documents the key features of each provincial site and the pages that tended to attract the most views over Phase Two.

The Construction Trades Hub sites include provincial sites, as well as a national site where users can select and navigate to their provincial site. While the national site only has a main homepage, the provincial sites have a range of features and pages, some of which are unique to a particular site. Most provincial Construction Trades Hub sites, however, share three common features:

- An **"Explore the trades" section** with individual trade pages that list unionized trades in the region. On this page, users first access a quick pop-up to read brief information about a trade and, if they are interested, can visit a new page that provides information about that specific trade, such as key responsibilities, skills, and salary range. Most trades pages are interactive, with a video users can watch and downloadable summary sheets that can be saved as a reference.
- A "Build Your Skills" section that encourages users to further develop useful skills to succeed in the trades by connecting to the Learning Hub. The first page describes the Learning Hub and invites users to create an account. To sign up, the user navigates to a second page with a short intake form (collecting name, email, trade of interest, level, etc.). Once a user submits the form, they then come to a page that thanks them for signing up (which was added in fall 2023). Across all sites other than Quebec, the information a user inputs into the sign-up form is sent to SkillPlan and the user receives a welcome email with directions on how to access the Learning Hub shortly after.
- A "Connect with a Union" section that was redesigned in fall 2023 to highlight the benefits of joining a union and lists union partners in the province. From this page, users can directly contact unions through their website (that are hyperlinked on the page) or using provided contact information. As part of the redesign of this page, users can provide their name, email, and phone number if they are interested in learning more about joining a union (see Figure 49 above). In the Learning Hub intake form, users can also check a box if they are interested in "receiving information about getting into an apprenticeship at a union training school," serving as an alternative way for potential recruits and unions to connect through the provincial site.

Along with these three main areas of each provincial Construction Trades Hub site, certain provincial partners also developed unique site features that serve their local needs. Table 5 presents a summary of site features and provincial customizations, which are further described in more detail below. At a glance, the table shows that the British Columbic, Ontario, Quebec, Nova Scotia, and Newfoundland and Labrador sites have customized features while the other sites have standardized content.

Table 5 Summary of Construction Trades Hub site features and customizations

Features									
	BC	AB	SK	MB	ON	QC	NB	NS	NFL
Site introduction video		×	× .	×	×		× .	×	× .
Explore the trades section and trade cards	1	1	1	1	×	1	×	1	1
Build your Skills section and sign up link	×	1	×	1	×	С	×	×	1
Learn about unions		1	1	1	×	С	× -	С	С
Connect to a union or advisor	С	1	×	1		С	×		1
List of unions, locals, and/or councils		1	1	1	×	С	×		С
List of training opportunities	С				С				С
Apprenticeship navigator					С				
Group-specific landing pages	1	1	1	1	~	1	×	×	С

✓ Standard site feature

C Customized feature

National Construction Trades Hub

Site overview

The national Construction Trades Hub site is hosted by Canada's Building Trades Unions and serves primarily as a landing page to direct users to specific regions in Canada. When navigate to the page, they see the headline "Interested in becoming an apprentice in the skilled trades?" with a brief description of the benefits of the unionized skilled trades sector. The main purpose of the site, however, is to direct users to the province where they are looking to enter the trades. Users can navigate to their provincial site through a drop-down menu or by clicking on a specific region on a map of Canada. The national site also has general information about the features of the provincial sites, highlighting career exploration tools, an interactive Learning Hub, and connection to unions and jobs.

New user acquisition and referral source

Across all sites shown in Figure 57, over 325,000 new users first landed on the national Construction Trades Hub site between January 1, 2023 and March 31, 2024. Provincial sites also had thousands of new users, rates that often correlated to their population; although Newfoundland and Labrador, Nova Scotia, and New Brunswick sites were not active until fall 2023 and therefore had a smaller number of new users.

What is a "new user"?

Google Analytics registers a website user as "new" if they do not have a website tracking cookie on their device/browser. If this cookie is present, they labelled "returning users." Google Analytics will incorrectly identify users as "new" if they return to the site on a different device/browser or use a website browser that blocks or removes tracking cookies.

Previously, when certain provincial sites were under the <u>https://constructiontradeshub.com/</u> domain, a user who first visited the national Construction Trades Hub site and then navigated to a provincial site was only counted as a new user once. However, mid-way through 2023 all sites moved to have their own domain. With this change, a "new" user is counted twice, first when they land on the national site and again when they visit their provincial site.



Of these new users, the majority were from devices located in Canada (see Figure 58), with only a small portion from other countries. The largest portion of new users from outside Canada were located in the United States (41 per cent among all international users), while smaller percentages were located in India (6 per cent), France (5 per cent), and Pakistan (3 per cent). As shown in Figure 59, users came from almost 200 unique countries around the world.



Figure 58 Number of new Canadian users to sites (Jan. 23-Mar. 24)





Figure 60 presents the "referral source" of new users who first visited the national Construction Trades Hub site. Users could navigate to the national site through several avenues, which are organized into different referral source categories:

- Organic social media: Users who clicked on a URL in a social media post or bio page. These
 were typically people who followed the social media account or were friends with another
 follower who engaged (i.e., shared, liked) with a post.
- Paid social media (excluding TikTok): Users who clicked on a URL from a social media advertisement. These were people who viewed and clicked on a sponsored/paid social media post.
- Paid TikTok: Users who clicked on a URL from a paid TikTok ad or via TikTok's mobile app advertising platform Pangle. During paid social media campaigns that ran in March and April 2023, we detected a high volume of traffic through TikTok's mobile app advertising platform Pangle. This traffic had an extremely high click-through-rate (i.e., ~50 per cent) but low activity once they landed on the national landing page. As we suspect that a high percentage of these users were bots, we have separated them into a distinct category from other paid social media sources.



Figure 60 National Construction Trades Hub new user referral source in (Jan. 23-Mar.

- Web search: Users who clicked on a URL after undertaking a keyword search through Google, Yahoo, Bing, or another web search engine. In late 2023 and early 2024, the project also ran paid sponsored/paid web search results on Google, which increased web search traffic to the sites during this time.
- **Direct**: Users without page referral information. Typically, they would land on a website by typing the web address information directly into their web browser, although they may have also navigated to a site through another pathway that Google Analytics could not capture. In some cases, this could include clicking on paid social media posts that did not include configured tracking parameters.
- Trades partners: Users who clicked on a URL provided on a provincial council or another trades-related website.
- **Referral/other source:** Users who clicked on a site URL active on another website or via another referral service (e.g., newsletter link).

Largely due to bot traffic, the most common referral source to the national Construction Trades Hub site was from TikTok, representing 81 per cent of all new users. Approximately 17 per cent of new users were classified as direct traffic, although many were likely from paid social media ads with incorrect or broken tracking parameters as their arrival to the site was largely parallel to the social media campaigns in spring 2023 (see Figure 61).





In terms of other referral sources, 3,137 new users to the national site came from paid social media ads, the majority of which (94 per cent) were from Facebook or Instagram. Another 3,219 users came through a web search engine, representing a large boost in numbers from Phase One of the project. Other trades-related sites also publicized the national site, with over 1,100 new users coming through this channel. Finally, a small number of new users also came via organic and other referral traffic sources.

British Columbia Construction Trades Hub

Site overview

Since the beginning of the Virtual Recruitment project, the College of the BC Building Trades domain has hosted British Columbia's Construction Trades Hub site. It focuses on connecting users with both training organizations and unions that offer training. Rather than a "Connect to Unions" page, it has a "Visit a School" page that lists several training institutions in BC, such as the BC Regional Council of Carpenters Training Centre, as well as unions that offer training, such as United Association Local 324.

Compared to the other provincial sites, it has a unique design and homepage layout (see Figure 62). It includes a standard "Explore the Trades" page that allows users to explore trades, including professions that are unique to the regional context (such as a camp workers trades page). There are also other pages that are unique to the site, such as the "Speak to an Advisor" section that includes a downloadable 48-page "Apprenticeship Guide" and a sign-up form if people are interested in connecting with an advisor. In fall 2023, group-specific landing pages were also added for women, newcomers, and youth to be incorporated into paid national social media campaigns.



New user acquisition and referral source

Between January 1, 2023 and March 31, 2024, over 54,000 new users visited the site, with the largest share coming from web search traffic, which included sponsored/paid search results in Google, and paid TikTok ads. As Figure 63 shows, many other users came from paid social media, organic social media, direct, and trades partner referral sources. Over 650 new users came from the national Construction Trades Hub (CTH) site and then navigated to the British Columbia site after selecting this region.





As visualized in Figure 64, the majority of paid TikTok traffic came to the site in March and April 2023. The next major increase in traffic took place from October to December 2023 when campaigns three, four, and five were taking place. Unlike the first round of paid campaigns in Phase Two, these campaigns included paid Google advertisements, which bolstered web search traffic during this period. There was also an increase in new users who arrived on the site after clicking on a paid social media ad in late 2023 and early 2024. Among users who came from paid social media ads, 45 per cent were from Facebook and Instagram, 38 per cent were from YouTube, and 17 per cent were from LinkedIn ads.



Figure 64 BC Construction Trades Hub new user acquisition over time by referral source

Site activity

Users who visited the site viewed a range of pages, with referral sources increasing traffic to certain parts of the site (see Figure 65). Largely driven by paid TikTok traffic, the Learning Hub information page was viewed over 50,000 times and 1,780 users navigated to either the Learning Hub or "Speak to an Advisor" sign-up pages. The homepage was the next most popular page, viewed over 16,800 times primarily by users with a direct, trades partner, or web search referral sources. Combined, trades pages had 11,062 views, while the trades exploration page that showcased all trades pages was viewed 5,167 times. Compared to other areas of the site, few users from organic or paid social media sources viewed the explore the trades area of the site.

As part of the second phase of social media campaigns, demographic-specific landing pages were created, and ads directed users to these tailored homepages rather than the more general homepage. Among these three pages, the youth landing page received the highest number of views (n=5,220), with the highest proportion of users coming from organic or sponsored web search referral sources.

Unique to this provincial microsite, the school and training exploration page also received a large number of views (n=11,062) across Phase Two, a page from which users can then get in touch with further trades training institutes across the province. Approximately one-fourth of sessions

that involved viewing the school exploration page were from users who found the site via a web search engine, while another one-fourth came from paid TikTok ads.



Figure 65 BC Trade Hub page views by referral source (Jan. 2023-Mar. 2024)

Alberta Trades Hub

Site overview

As Figure 66 illustrates, the Building Trades of Alberta Construction Trades Hub homepage has a simple design with clear messaging consistent with many of the social media ads (i.e., "Earn while you learn. Attractive salaries. Growth opportunities"). It includes all of the standard provincial site features, including:

- an "Explore the Trade" page where users can view a range of unionized skilled trades pages in Alberta (including tourism and hospitality trades, which is unique to the site);
- a "Build Your Skills" page where users can gain more information about the Learning Hub and navigate to the sign-up page;
- and a "Connect to Unions" page where people can view a video about the benefits of being in a union, sign up to learn more about how to join a union, and see contact information for affiliated unions in the region.



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New user acquisition and referral source

Unlike the British Columbia site, the Alberta site had the same domain as the national Construction Trades Hub homepage between January and May 2023, although it received a unique domain after this point. For this reason, the national Construction Trades Hub site was a less prominent referral source (see Figure 67). Prior to May 2023, if a user first visited the national landing page, their referral source was the site prior to accessing this national site.

For the Alberta site, sponsored and organic web search links were the largest referral source (n=14,095). Many users also navigated to the Alberta site after clicking on an ad that was part of a paid social media campaign on Facebook, Instagram, LinkedIn, and YouTube (n=4,637 combined), as well as TikTok (n=8,647). Another 1,678 users visited the site after engaging with an organic social media post. Over 3,800 Alberta users had a direct referral source; that is, they typed the site URL directly into their browser or their referral source could not be identified by Google Analytics. Trades partner sites that listed the Alberta site also referred almost 1,250 new users to the site, while over 400 came from organic social media posts.

Figure 68 shows cumulative new user acquisition from January 1, 2023 to March 31, 2024. Like other regions, there was an increase in new users primarily from paid TikTok ads and web search referral sources during the first campaign period in spring 2023. Starting in fall 2024, there was a second large increase in the number of new users, especially from organic and sponsored web search sources, although paid social media and direct sources also picked up during this time.



Figure 67 Alberta Construction Trades Hub new users by referral source (Jan. 2023-Mar. 2024)

Figure 68 Alberta Construction Trades Hub new user acquisition over time by referral source



Site activity

As Figure 69 illustrates, Alberta's Learning Hub information page received the most views, almost 18,000, largely driven by users who first visited the site after clicking on a paid social media ad. The number of views on the Learning Hub information page was smaller than on the British Columbia site, but this was likely due to a website configuration error in May 2023 that prevented Google Analytics from capturing data during the first campaign period. In any case, a similar number of users in both regions went on to view the Learning Hub sign-up page, which had over 1,600 views on the Alberta site.



Figure 69 Alberta Trade Hub page views by referral source (Jan. 2023-Mar. 2024)

The Alberta site's "Connect to Unions" page received just under 8,000 views, a large proportion being users from paid social media sources. Combined, trade pages were also popular and were viewed over 5,500 times. Few users from paid TikTok ads went on to view trades pages, as users who viewed these pages tended to be from direct, trades partner, or web search referral sources. As implemented in fall 2023, group specific landing pages also had a high number of views. The most popular was the newcomer landing page, with over 6,000 views. Traffic to these group-specific landing pages were bolstered by paid social media campaigns and the sponsored web search strategy implemented during this time.

Saskatchewan Construction Trades Hub

Site overview

The Saskatchewan Building Trades Construction Hub includes all the standard provincial site features, including: the "Explore the Trades" page with links to various trades pages; the "Build Your Skills" page that has information and sign-up pages for the Learning Hub; and a "Connect to Unions" page that lists provincial unions. As Figure 70 shows, the colouring aligns with Saskatchewan Building Trades branding and the wording mirrors social media assets used throughout Phase Two.



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New user acquisition and referral source

Figure 71 visualizes the most common referral sources for new users on the Saskatchewan site, showing that the most popular source was through web search engines (which includes users who clicked on paid/sponsored links). While fewer users who visited the Saskatchewan site were from paid social media campaigns compared to Alberta, they still represented a large share of the traffic to the site; the paid TikTok campaign brought in 6,195 new users while another 2,983 came via paid posts on other social media platforms.

Many new users (n=1,047) came from trades partner sites that advertised the provincial site, and a similar number also came from direct/other sources (n=965). As the Saskatchewan domain was the same as the national site in early 2023, only a small number of users had the national Construction Trades Hub (CTH) site as their referral source.



Figure 71 Saskatchewan Construction Trades Hub new users by referral source (Jan. 2023-Mar. 2024)

Similar to other regions, the Saskatchewan site had two major increases in traffic corresponding with the Phase Two campaign periods (see Figure 72). The majority of new user acquisition during campaign one in spring 2023 came from paid TikTok and web search referral sources, while campaign two in fall 2013 saw an increase in new users from web search, paid TikTok, and paid social media sources.

Figure 72 Saskatchewan Construction Trades Hub new user acquisition over time by referral source



Site activity

When examining page views across the Saskatchewan site in Figure 73, we again see that the Learning Hub information page had the most views, largely driven by the paid social media and sponsored web search campaigns. Like Alberta, the total number of views is smaller than other regions due to a website configuration error in early May 2023 that prevented Google Analytics from recording data. Nevertheless, the Learning Hub information page had 14,523 views, while the sign-up page had 682 views.

Largely driven by paid campaign traffic in fall 2023, the women, newcomer, and youth landing pages all received a high number of views, with the women landing page being the most popular (n=5,959). This fall campaign also increased traffic to the union page (n=6,279), where a high proportion of users landed on the page after clicking on a paid social media post. The homepage also had over 3,600 views, while trades pages had a combined 2,598 views.





Manitoba Construction Trades Hub

Site overview

Similar to the Alberta and Saskatchewan sites, the Manitoba Building Trades Construction Trades Hub site includes all of the standard provincial site features but with Manitoba Building Trades brand colours (see Figure 74). The "Explore the Trades" page is where users can navigate to unique trades pages. The "Build Your Skills" section includes information about the Learning Hub and a page where users can sign up. The "Connect to Unions" page highlights the benefits of being a union member and lists provincial unions. This page also includes a sign-up form for people who are interested in learning more about how to join a union. Unique to this site, the Manitoba site includes a "Visit Us" page that provides information on the Manitoba Building Trades Exhibition Hall.



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New user acquisition and referral source

As Figure 75 illustrates, the most popular referral source for acquiring new users to the Manitoba site was through paid social media. Over 14,000 new users came through paid TikTok channels, while over 19,222 came from a combination of other paid social media sources (e.g., Facebook, Instagram, LinkedIn, and YouTube). Along with the national social media campaigns, Manitoba Building Trades also ran their own social media campaigns in the second half of 2023, which increased the number of new users coming through these channels.





Figure 76 Manitoba Construction Trades Hub new user acquisition over time by referral source



A sizable number of new users (n=9,677) also landed on the Manitoba site via an organic or sponsored link on a search engine. Another 2,162 came to the site as direct traffic. Trades partner sites referred 873 new users to the site. Most of this traffic came from the Manitoba Building Trades site, which includes a small icon at the top of each page inviting users to "Try the Trades." Finally, a small number of users came from organic social media (n=118), other referral sources (n=23), and the national Construction Trades Hub (CTH) site (n=7).

In terms of new user acquisition over time, Figure 76 shows that the majority of new users in spring 2023 navigated to the Manitoba site via paid TikTok posts. Beginning in fall 2023, a number of new users also arrived after viewing a paid social media post on another platform (i.e., Facebook, Instagram, YouTube, etc.). Web search traffic also increased during this second campaign period, as seen on other provincial sites.

Site activity

Examining the number of page views across the Manitoba site in Figure 77 shows that the paid social media campaign drove traffic to the Learning Hub information page, which was the most popular page after being viewed over 31,800 times. Among them, 1,031 went on to view the Learning Hub sign-up page. The homepage had 27,693 views, which was mainly among users who came through paid social media channels. The union information page also had a high number of views (n=7,324), with many of these users coming from paid social media referral sources.

The Explore the Trades page had 5,251 views, and the trades pages had a combined 5,799 views. Many users who viewed these pages came from direct, trades partners, and web search sources. Implemented in fall 2023, the youth, women, and newcomer landing pages also received a large number of views, with the women and youth pages receiving just over 4,000 views each. Finally, the "Try the Trades" page that provides an overview of the Manitoba Building Trades Exhibition was viewed 949 times.





Ontario Construction Trades Hub

Site overview

The Ontario Construction Trades Hub is hosted by Construction Training & Apprenticeship Ontario (CTAO) and—like the British Columbia site—has always had a unique domain. As Figure 78 visualizes, it has a different look and feel compared to the other sites but incorporates some of the standard features, such as the site introduction video midway down the homepage.

The structure and organization of the Ontario site includes several customized elements:

The "Exploration" dropdown menu includes links to the "Explore the Trades" pages (where users can view trades specific to the Ontario region), as well as "Explore the Unions" and "Explore Local Councils" pages. The "Explore the Unions" link brings users to a page that highlights advantages of joining a union and a list of locals in Ontario. On the "Explore Local Councils" page, users can click on two regional pages: 1) Waterloo, Wellington, Dufferin & Grey Building & Construction Trades Council or 2) Eastern Ontario and Western Quebec Build Trades Council, which were also used as landing pages in social media campaigns.



- The "Education" section of the site includes the Build Your Skills Learning Hub information and sign-up pages, as well as a page on "Frequently Asked Questions" about training in the trades (e.g., What is an apprenticeship? What financial support is available for apprentices?).
- To further connect with the trades industry, users can go into the "Application" section of the site and use the "Apprenticeship Navigator." This tool allows users to search for apprenticeship opportunities and select the ones offered closest to them.
- The **"Tomorrow's Trade**" page provides information on training, skill assessment, and guidance opportunities funded by Ontario's Ministry of Labour, Immigration, Training and Skills Development.
- Users can also contact CTAO directly using a form in the "Contact" section of the site.

New user acquisition and referral source

As Figure 79 shows, the most popular referral source to the Ontario site was through organic and sponsored web search links, attracting over 53,000 new users over Phase Two of the project. Another 16,778 new users also came directly to the site without any referral source information.



Figure 79 Ontario Construction Trades Hub new users by referral source (Jan. 2023-Mar. 2024)

Along with the national paid social media campaigns described above, provincial paid and organic social media campaigns in Ontario increased traffic to the site. Over 19,400 users arrived on the Ontario site after clicking on a paid TikTok ad and another 7,195 came through other paid social media sites.

Organic social media traffic also accounted for 9,967 new users. Compared to the other regions, Ontario had ongoing posts about the site during Phase Two, frequently posting multiple times a week on Instagram, X/Twitter, and Facebook. Even though CTAO did not have a large follower count during this period (e.g., it was 1/10th of the size of Alberta's follower count across their platforms), ongoing social media posts paid off in terms of attracting a steady stream of new users to their site.

The national Construction Trades Hub site also brought 2,970 new users to the Ontario site. In addition, 759 users also navigated to the site via trades partner referral sites, while another 2,138 came from other referral sources. Some of these "other sources" include print media and government sites in Ontario.



Figure 80 Ontario Construction Trades Hub new user acquisition over time by referral source

In terms of new user acquisition over time, Figure 80 illustrates that the Ontario site had a steady flow of new users from May 2023 onward. There was a large increase in users from paid TikTok ads in early May, while users from organic and sponsored web search sources increased in fall 2023. All other referral sources were more gradual but constantly attracted new users.

Date

Site activity

In terms of page views reported in Figure 81, trades pages received the highest number of views on the Ontario site, with a combined 74,100 views. Most of the users who viewed these pages were from direct, trades partner, or web search referral sources. The "Explore the Trades" page was also viewed 64,172 times, while the homepage had 49,848 views from a range of sources.

Unlike other regions, the first national campaign increased traffic to the Ontario Learning Hub sign-up page (e.g., https://constructiontradeshub.com/ctaontario-register/) rather than the information page (e.g., https://www.ctaontario.ca/build-your-profile). This resulted in the Learning Hub sign-up page being viewed over 46,000 times primarily by users from paid TikTok ads.





The second campaign period increased traffic to the union information page, which was viewed 49,114 times, primarily through sponsored web search results. During this second campaign period, group-specific landing pages targeting women, newcomers, and youth were also created. Overall, the youth landing page attracted the highest number of views (n=6,286), while the newcomer landing page also had 5,000 views and the women landing page had just over 1,100 views.

The Apprenticeship Navigator tool page, a unique feature of the Ontario site, was viewed over 30,000 times by a range of referral sources, with a high proportion being from organic and paid social media sources. Local council pages, which went live in fall 2023, were viewed over 3,100 times, while the Tomorrow's Trade page had over 1,600 views.

Quebec Construction Trades Hub

Site overview

The Quebec Construction Trades Hub is hosted by "Travailler en construction" (Work in Construction) and is only available in French. The site is divided into similar sections as the other provincial sites. However, the "Build your Skills" and "Connect to a Union" section of the site takes users to other web pages hosted by the Conseil Provincial International Construction union. On these pages, users can register for the Learning Hub or fill out a union contact form—information that is collected by Travailler en construction and then sent to SkillPlan.



Trouve ta place dans l'industrie

At the bottom of the Quebec homepage, trades pages are illustrated with pictograms. Like the other sites, each trades page has videos and information specific to that trade so users can explore different occupations. Most trades pages include a banner with a video that automatically starts when a user surfs to the page, as well as short videos that describe the trade.

New user acquisition and referral source

Like Ontario, Quebec has also been active in promoting their site through provincial paid and organic social media campaigns. This is evident in Figure 83 which shows that paid social media referred the majority of new users (n=85,089) to the Quebec site. Another 6,744 new users navigated to the site via a search engine, while 4,205 came after viewing an organic social media post.





Figure 84 Quebec Construction Trades Hub new user acquisition over time by referral source



Like the other regions that had the same domain as the national Construction Trades Hub (CTH) site for a portion of 2023, few users were captured as referred from the CTH main page (n=151), although these users may be present in the other categories (e.g., Paid TikTok traffic). A few users also first arrived on the Quebec site from a trades partner or other referral traffic source.

In terms of new user acquisition over time (see Figure 84), traffic from paid social media increased steadily over most of 2023 but plateaued in late fall and spring 2024. In fall 2023, there was an increase in new users from organic and sponsored web search sources, as well as organic social media sources.

Site activity

A unique aspect of Quebec's Phase Two social media campaigns was that they directed traffic to trades pages, which combined received over 129,000 views. As Figure 85 illustrates, the majority of site views were across the trades pages rather than the homepage, which had 9,854 views. In fall 2023, underrepresented group landing pages went live. The women landing page received the greatest number of views (n=4,225), although the newcomer and youth landing pages had similar view counts. Because the Learning Hub and union information sign-up pages are hosted on a different site, we are unable to measure the number of page views they received.





New Brunswick Construction Trades Hub

Site overview

In fall 2023, three new provincial sites were integrated into the Construction Trades Hub network of sites. One of these was the New Brunswick site, which went live on October 10, 2023. New Brunswick's Building Trades Unions Construction Trades Hub includes all standard provincial site features, including "Explore the Trades," "Build Your Skills," and "Connect to Unions" section (see Figure 86). The colouring aligns with New Brunswick's Building Trades Unions' logo, and the Connect to Unions page lists and links to 17 locals in Atlantic Canada.



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New user acquisition and referral source

After the New Brunswick site went live in fall 2023, almost 15,000 new users visited the site during the remainder of Phase Two. As Figure 87 shows, the most popular referral source during this period was through organic or sponsored search engine links, bringing 4,771 new users to the site. Figure 88 shows that the majority of new users who came through search engine referrals did so in October 2023 when paid campaigns were taking place.

A large number of new users to the site also came through paid TikTok (n=4,271) and paid social media ads (n=2,836) with their numbers increasing in early 2024. Also in early 2024, there was an influx of new users from organic social media sources when New Brunswick's Building Trades Union (NBBTU) started posting about the site on Facebook, LinkedIn, and X/Twitter. These simple and periodic posts linked to the site or the NBBTU website information page about

their provincial Construction Trades Hub site. Another 860 new users came through direct sources, while 98 came from trades partner sites and 5 were from other referral sources.







7 New Brunswick Construction Trades Hub new users by referral source (Oct.

Site activity

On the New Brunswick site, the union information (n=4,571), Learning Hub information (n=4,353), and women landing (n=4,184) pages received the highest number of views. Users from sponsored and organic web search referral sources were more likely to visit the landing pages, while paid social media referral sources drove traffic to the union and Learning Hub information pages. Alternatively, traffic to the homepage, which received 3,272 views during this period, was largely from organic social media sources.



Nova Scotia Construction Trades Hub

Site overview

The Nova Scotia Construction Sector Council Construction Trades Hub went live in October 2023 and includes the standard "Explore the Trades" page—where users can view trades pages—and the "Build your Skills" features—where users can learn about and sign up for the Learning Hub.

Unlike the other provincial sites, it includes a "Connect to Industry" instead of a "Connect to Unions" page. This area of the site is a single page that lists and links to various industry councils and agencies, such as the Nova Scotia Apprenticeship Agency and the Cape Breton Island Building & Construction Trades Council. Users can visit these external sites to find out more about their services.



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New user acquisition and referral source

Between October 2023 and March 2024, over 11,500 new users visited the Nova Scotia site. As Figure 91 shows, almost half of these new users came from sponsored and organic web search sources (n=5,606), with the greatest influx of these users coming at the start of the fall 2023 campaign period (see Figure 92). Social media referral sources also brought in new users, with a higher influx of these users coming in late 2024. The largest number of these paid social media users came from paid TikTok ads (n=2,568) and other paid social media sources (n=1,845). Another 884 new users visited the site after clicking on an organic social media post. Finally, 477 users were from direct sources, while 154 were from other referral sources and 5 were from trades partner sites.



Figure 91 Nova Scotia Construction Trades Hub new users by referral source (Oct. 2023-Mar. 2024)





Site activity

Across all site pages, the Learning Hub information page had the largest number of views (n=4,458), with a large proportion of these users coming from paid social media and web search sources. From this information page, the Learning Hub sign-up page received 348 views. The group-specific landing pages also had many views, especially the women (n=3,957) and youth (n=2,811) pages. The homepage had just under 200 views, with a large percentage of these users coming from organic social media sources. Collectively, trades pages received 1,272 page views. Unlike the other provincial sites, the "Connect to industry" page only received a small number of views (n=257), mainly as it was excluded from the union-focused paid campaign that other provincial sites were a part of.



Figure 93 Nova Scotia Construction Trade Hub page views by referral source (Oct. 2023-Mar. 2024)

Newfoundland and Labrador Construction Trades Hub

Site overview

The College of the Skilled Trades NL, Newfoundland and Labrador's Construction Trades Hub went live in October 2023 and includes all of the standard provincial site features (see Figure 94). The "Explore the Trades" section includes trades pages with further information on key trades in the region. Under the "Connect to Unions & Training Centres" section, users can view a list of both training organizations and unions, as well as complete a sign-up form to learn more about how to join a union.

Unlike the other sites, the Newfoundland and Labrador Construction Trades Hub includes a link to the "Indigenous Skilled Trades Office" which is an external site that supports provincial recruitment of Indigenous peoples within the skilled trades. On this site, Indigenous users can fill out a form to receive support from one of three local offices—recruitment that is not monitored as part of the Virtual Recruitment project.

Figure 94 Newfoundland and Labrador site homepage



Start Planning Your Construction Career Earn while you learn. Attractive salaries. Growth Opportunities.

New user acquisition and referral source

Between October 2023 and March 2024, over 11,200 new users visited the Newfoundland and Labrador Trades Hub site. As Figures 95 and 96 show, over half of these users came from paid or organic social media sources. Most new users came after clicking on a paid TikTok (n=3,309) or other social media (n=3,111) ad. A high number of new users also visited the site after clicking on an organic social media source (n=1,806). Over this period, only a few organic social media posts

advertised the Construction Trades Hub site; however, many of these posts resulted in dozens of clicks to the site. Another important referral source for new users was sponsored and organic search engine links (n=1,887). Another 797 users came from direct sources, while 342 were from trades partner sites.



Figure 96

Newfoundland and Labrador Construction Trades Hub new user acquisition over time by referral source


Site activity

Largely driven by users from organic and paid social media sources, the Learning Hub (n=5,376) and union (n=4,328) information pages received the largest number of views between October 2023 and March 2024. Among those who viewed the Learning Hub information page, 287 went on to view the sign-up page. The homepage, trades exploration page, and trades pages also received a high number of views, with many of these users coming from direct, trades partner, and web search sources. As integrated into the fall 2023 campaign period, the women, youth, and newcomer landing pages each received between 800 and 1200 views.

Figure 97





LEARNING HUB OUTCOMES

Overview of recruitment channels

On each provincial Construction Trades Hub site, users can sign up for the Build Your Skills Learning Hub by completing a brief intake form, which includes: name; email; phone number; trade experience or pathway (options include: exploring a trade, pre-apprentice, apprentice, or training provider); trade of interest (including "still deciding"); and how they learned about the online Learning Hub (options include: social media, a trainer/teacher/councillor, an event, a union, or other). There is also an additional section on most provincial Learning Hub registration forms where individuals can indicate that they would like to: "connect to available construction job opportunities with a local union," and/or "receive information about getting into an apprenticeship at a union training school."

Ongoing recruitment to the Learning Hub also occurs through the SkillPlan website (www.skillplan.ca), where interested individuals can also register to the Learning Hub. They complete a form that is very similar to the registration form on the provincial Construction Trades Hub sites, but asks additional background questions (e.g., if the person is a learner exploring the trades, apprentice, union training provider, college training provider, community or support organization, etc.).

All new Learning Hub registrants from provincial Construction Trades Hub sites (except Quebec) have an option to click the "connect to a union" box on the intake form. When they select "connect to a union" they are added to a spreadsheet administered by SkillPlan. The SkillPlan administrator shares these contact details with representatives of the provincial building trade council or follows up with the person directly to provide support. The Quebec Construction Trades Hub site links to an external Learning Hub sign-up form. For new Quebec registrants, a SkillPlan administrator shares the Learning Hub usernames and contact details with the Quebec trades council.

Along with the provincial and the SkillPlan sites, Learning Hub users can come from other recruitment channels. There are a number of direct enrollment channels to the Learning Hub through training partners and unions who have new and previous relationships with SkillPlan (e.g., in-class programs delivered by SkillPlan, SkillPlan tutoring, union intake testing preparation and support, etc.), through networking and conference presentations, as well as a variety of special projects (e.g., CBTU Apprenticeship Services, school boards/post-secondary schools, etc.). In the analysis below, Learning Hub users who signed up through these other recruitment channels or via the SkillPlan website sign-up form are referred to as "non-virtual recruitment users."

During Phase One of the Virtual Recruitment project, users registered on the previous version of the Learning Hub through the Magnet portal. Through a series of emails early in Phase Two, these users were informed about the Learning Hub moving to a new site location to accommodate the additional resources. A total of 92 users who had logged onto the system within six months were automatically registered on the new Learning Hub and had essentially one click access to get started on the new site.

The registration process and initial contact with users

When a provincial Construction Trades Hub or SkillPlan site user completes the intake form, SkillPlan manually registers them for the Learning Hub. For all regions other than Quebec, the Learning Hub registration process through the provincial sites and SkillPlan website is similar. Users who select explorer, pre-apprentice, or apprentice as their experience level are registered in all Foundational courses (Trade Math 1, Trade Math 2, Math Applications, Practice Test, Trade Science). Selecting a trade of interest does not change the enrollment options. Users are then sent a welcome email from the SkillPlan E-Learning Administrator, which includes what course topics are included in the online learning, how to login to access these courses, as well as the URL, their username, and initial password.

Users who select their trade experience level as "trainers" are contacted via email by the SkillPlan E-Learning Administrator to set up a meeting to discuss options to use the Learning Hub. Typically, following this meeting, the trainers are given an "auditor" rather than a "learner" account. If they do not identify a trade of interest, instructors will receive access to foundational courses. If they do specify a trade of interest, they will receive access to a trade course package, which includes foundational and trade-specific courses. Instructors then receive a welcome email with login information to their auditor account, where they can view courses, take quizzes, and get a general feel for how to navigate the tools and resources on the Learning Hub.

All new users who have not logged on after three days automatically receive a reminder that they have been enrolled in the Learning Hub. If they still have not logged on, another reminder is sent after 10 days. Most new users, regardless of whether they have logged on or not, receive an email invitation to complete the intake survey seven days after registration; although, some non-VR users who participate in projects with specialized data collection procedures do not receive an invitation to this intake survey.

The sample survey invitation that was used mid-way through this project is shown below. From October 20, 2023 onward, however, the survey was no longer incentivised with the \$20 gift card but remained active.

Hi {InitiatingUserFirstName},

You were recently enrolled in the Build Your Skills Learning Hub.

Whether you've visited the site or not, we are inviting you to complete a short intake survey. By participating in this survey, you will help us better understand who signs up and what resources people are seeking so we can enhance learning and trades support.

When you have completed the survey, you will receive a \$20 Amazon e-gift card (within 5 business days).

Click to access the survey!

If you have any questions about the survey, please do not hesitate to reach out to apullman@srdc.org. If you have questions about the Build Your Skills Learning Hub or need help logging in, contact learn@skillplan.ca.

Please note that you may only complete this survey once.

Build Your Skills E-Learning Administrator

New user acquisition on the Learning Hub

Figure 98 illustrates cumulative Learning Hub registration numbers during Phase Two (up to April 2, 2024) from all provincial sites and the SkillPlan website. Figures 99, 100, and 101 provide cumulative registration numbers for the provincial sites. Note that the registration dates for the sites vary across the graphs. For most provincial sites, the graphs begin on January 1, 2023 when recruitment for the new Learning Hub began. However, Nova Scotia, New Brunswick, and Newfoundland launched their sites October 1, 2023 so registration via this channel was not available prior to this period.

The number of new registrations to the Learning Hub has shown continual growth throughout Phase Two, with more rapid growth for most regions as of October 2023 when advertising campaigns three, four, and five began. Ontario underwent a period of rapid growth beginning in August 2023. The spike in registrations in New Brunswick and Nova Scotia in November 2023 is likely due to the manual registrations completed in one batch over a single day.





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Figure 100 BC, AB, SK and MB Learning Hub registrations

Figure 101 NS, NB and NL Learning Hub registrations



Intake form results

Figure 102 shows how VR users learned about the Learning Hub, choosing from one of the options listed on the intake form. This information was available on most provincial site registration forms other than the Quebec form. Just over half the registrants learned about the Learning Hub from social media, while approximately a quarter learned about the site from other sources (e.g., Google search), 10 per cent from a teacher, trainer, or counsellor, and 5 per cent from an event.



Figure 102 How VR registrants learned about the Learning Hub (n = 2,758)

Note: Missing values excluded. Not collected for Quebec and when the intake form was first implemented.

There was, however, variation in how VR users learned about the Learning Hub across each region (see Figure 103). Social media was the most frequently stated way users heard about the Learning Hub in all provinces except Ontario, where networking and other methods attracted more users. The results also show that, in the Maritime regions where sites were launched in fall 2023, a larger percentage (between 74 and 80 per cent) of users learned about the Learning Hub via social media.



Figure 103 How VR users learned about the Learning Hub by region (n = 2758)

On the intake form, VR users also indicated their trade pathway at the time of registration, though this was not included on the Quebec intake form. In Figure 104 we see that 61 per cent of registrants were explorers, 27 per cent were pre-apprentices, and 12 per cent were apprentices. There were also 10 trainers who registered through VR channels.





We also looked at the distribution of user trade pathways provincially (see Figure 105). In most regions, approximately 60 per cent of VR registrants were explorers except in British Columbic where 45 per cent were explorers. There was more variation in the proportion of pre-apprentices across regions—British Columbia, Ontario, and Nova Scotia had 34, 30, and 28 per cent respectively, while the proportion of pre-apprentices in the other regions ranged between 15 and 25 per cent. There was also more variation in the proportion of apprentices across regions,

Note: Missing values excluded. Not collected for Quebec.

where Newfoundland, British Columbia, and Alberta had 23, 21 and 19 per cent respectively, while the remaining regions ranged between 15 and 6 per cent.



Figure 105 VR trade pathways by region (n = 3,227)

Note: Not collected for Quebec.

Learner Hub intake survey results

Overview

One week after most new users received log-on information for the Learning Hub, they were invited to complete an intake survey. From the time the intake survey was implemented on May 14, 2023 to the cut-off date of April 2, 2024, a total of 1,314 individuals completed the survey. Approximately one third (n=405) of these responses were from individuals who registered for the Learning Hub through virtual recruitment provincial sites. The other two-thirds (n=909) were users who came from a variety of other recruitment channels to the Learning Hub (including the SkillPlan website).

The intake survey consisted of approximately 25 questions, of which 10 were geared to collect demographic data such as age, gender, Indigenous status, racialized status, newcomer status, disability, province, and education. The bulk of the survey collected information on respondents' current training status, trade level, current trades employment status, future plans within the trades, and confidence in skills (e.g., math, reading, etc.). There were also several questions about their initial engagement on the Learning Hub, their perceptions of its usability, and how they intended to use the site. The survey took users less than 10 minutes to complete, and a \$20

electronic gift card was offered to each respondent up to October 20, 2023. After this date new Learning Hub registrants were still invited to complete the intake survey, but no incentive was provided.

The intake survey invitation was sent out to new users designated as "learners" on the Learning Hub, though this population did include a small number of training providers from trades colleges and training centres as well as high school staff. Within the survey itself, those individuals identified as training providers in the trade level question were directed towards questions pertaining to their training role, while all other respondents completed separate questions on the topics previously described.

Profile of VR learner respondents

The vast majority, 71.3 per cent, of the survey respondents coming through the virtual recruitment (VR) channels were "explorers," over twice that of non-VR users, while 17.1 per cent were pre-apprentices, 7.9 per cent were apprentices and 1.5 per cent were journeypersons (see Figure 106). Only 1.2 per cent of VR respondents were training providers. For non-VR survey respondents, the proportion of explorers (34.8 per cent), pre-apprentices (29.1 per cent), and apprentices (28.6 per cent) were similar, while 3.7 per cent were journeypersons. This speaks to the success of virtual recruitment outreach, which largely aimed to attract people who were interested in further exploring the trades.



Figure 106 VR and non-VR user trade levels (%)

Note: VR user n=394; Non-VR user n=894. Missing values excluded.

Figure 107 provides a summary of the demographic profile of VR and non-VR users who completed the Learning Hub intake survey. The representation of equity-seeking groups was quite high in both the VR and non-VR user groups, with some notable differences.



Figure 107 Underrepresented VR vs non-VR users

Note: VR user n=298 to 405; Non-VR user n=636 to 909; Missing values excluded.

The most prominent difference between VR and non-VR respondents was that the proportion of newcomers, which was more than double in VR users (56 per cent) compared to non-VR users (26 per cent). A higher percentage of VR users also identified as being racialized (30 per cent) compared to non-VR users (22 per cent). This result suggests that the virtual recruitment resources were particularly effective in attracting newcomers and racialized groups ready to engage in online training.

Another notable difference is in the age range, where almost 50 per cent of the non-VR respondents were youth between the ages of 18 and 29 (with an additional 5 per cent younger than 18 years old). In contrast, a lower per cent of VR users were youth (29 per cent). This may be due to non-VR respondents coming from high school and post-secondary partnership projects with SkillPlan. Instead, 54 per cent of VR users who completed the intake survey were aged 30 and 44 years and another 15 per cent were 45 and older (not shown in the figure). This age representation suggests that the virtual recruitment resources reached a broad age range of individuals.

The proportion of women, persons who report having a disability and Indigenous Persons was slightly higher for non-VR users compared to VR users. This may be partially due to the non-VR

user group coming from organizations and programs that support specific equity-seeking groups, such as women and Indigenous Persons.

Learning hub introduction and intention

Looking at recruitment channels for VR and non-VR users who completed the intake survey (see Figure 108), approximately 35 per cent of VR users came to the Learning Hub through social media and web search channels respectively, and 23.2 per cent from trades-related websites. There were still a number of VR user who found the Learning Hub through word-of-mouth channels, such as from a friend, colleague, teacher, or community member (7.2, 5.7, and 4.7 per cent respectively).

In contrast, approximately 26 per cent of non-VR users came to the Learning Hub through trades-related websites and teachers, with only 7.3 per cent coming through social media and web searches. Other common recruitment channels for non-VR users included other means (e.g., job fairs and radio) and friends or colleagues (16.5 and 14.6 per cent respectively).



Figure 108 Recruitment channels among VR and non-VR users

Percentages do not equal 100% as respondents can select all that apply.

There were some differences between VR and non-VR users regarding their comfort level with online learning. Figure 109 shows results for user comfort level with online learning. Almost 70 per cent of VR users reported being very comfortable (selecting 8, 9, or 10 on a 10-point sliding scale) compared to 57.1 per cent of non-VR users. Only 4 per cent of VR users and 5 per cent of

non-VR users indicated low comfort levels with online learning. Comfort level with online learning may play a role in determining how appealing this medium of skills training is to individuals, particularly as the trades work environment and traditional training are highly hands-on in nature.



Table 6 provides insight related to how VR and non-VR intake survey respondents intended to use the Learning Hub. Compared to non-VR users, a larger proportion of VR users planned to explore information on different trades (90 per cent), try a practice test (90 per cent), review their skills (89 per cent), look at different courses (89 per cent) and start a course (88 per cent). A similar proportion of VR and non-VR users indicated that they intended to complete a course and take a mandatory assessment, while a larger proportion of VR users planned to connect with a union (80 per cent) compared to non-VR users (68 per cent). This may be due to more non-VR users already being connected with unions before registering on the Learning Hub. Overall, the VR users responding to the intake survey indicated that they intended to engage with the Learning Hub in a variety of ways, such as exploring trades, taking a practice test, and trying different courses.

Table 6 VR and non-VR user intentions with the Learning Hub

At	ntake, were likely or very likely to:	%VR	% non-VR
\checkmark	Explore information on different trades.	90%	63%
\checkmark	Try a practice test.	90%	83%
\checkmark	Review my skills.	89%	82%
\checkmark	Look at the different courses.	89%	73%
\checkmark	Start a course	88%	74%
\checkmark	Complete a course.	85%	83%
\checkmark	Take a mandatory assessment.	85%	82%
\checkmark	Connect with a union.	80%	68%

Initial impressions of usability

Looking at initial impressions of usability for VR and non-VR intake survey respondents (see Table 7), all users agreed or strongly agreed that the content on the site was useful, the information was relevant, and they were satisfied overall with the design of Build Your Skills (86 to 90 per cent). Slightly more non-VR users agreed or strongly agreed that was clear how to use the site and the layout out was well organized (83 per cent and 84 per cent), compared to VR users (82 per cent and 81 per cent). The percentage of both VR and non-VR users who agreed or strongly agreed that "accessing different courses is easy" and that they are "able to access technology support when needed" decreased slightly to the 75 to 79 per cent range. This may indicate that the process or information regarding accessing different courses and tech support could be clearer on the site.

Table 7VR and non-VR impressions of the usability of the Learning Hub

At	intake, agreed or strongly agreed:	% VR	% non-VR
✓	I find the content on the site useful.	90%	86%
✓	The information on the site is relevant to me.	89%	86%
✓	Overall, I am satisfied with the design of Build Your Skills.	86%	86%
✓	It is clear how to use the site.	82%	83%
\checkmark	The layout of the site is well organized.	81%	84%
✓	Navigating the site is straightforward.	81%	82%
✓	Accessing different courses is easy.	78%	79%
✓	I am able to access technology support when needed.	76%	75%

Comments from Learning Hub users

Open-ended comments on the intake survey show how learning resources helped users at all stages of their apprenticeship journey. A pre-apprentice commented:

"I am very happy with all the resources available on the Learning Hub. I find its content very important and extremely useful to apply in my future career in order to become more qualified. I really hope to still have access to it after completing my Pre-Apprenticeship program."

One learner who was further along in their apprenticeship stated:

"I am a 22-year-old, third-year plumbing apprentice who dreams one day to become a foreman. Resources like these that are cost free, are such important tools that can really help and encourage apprentices. Thank you."

Another learner stated:

"I am glad this content has been created to assist me in my four-year carpentry apprenticeship."

People from underrepresented groups also commented on the benefits of the Learning Hub. One learner commented:

"I love SkillPlan. They helped me a lot as a newcomer. It's a totally different work culture and system, but because of you I am here, and I am a second-year Red Seal apprentice. I appreciate your support."

Another learner stated:

"Thank you SkillPlan. You're really giving me so much confidence about math and knowledge about the trades. Currently, I already got a certificate of Math 1 and I am about to get another one of Math 2 soon. My future is shining with SkillPlan and I am really very excited. I also refer all my friends who are immigrants like me and have interest in trades but don't know where and how to start. Thank you."

In addition to supporting existing apprentices in their current trade, Learning Hub resources have been beneficial in providing information about other trades. One learner stated:

"It is an amazing initiative and encouraged me to build new skills and improve existing ones and even looking at exploring other careers."

Another learner comments:

"Thanks for the opportunity to get involved in learning about different trades, and figuring out where I can connect to make an informed decision on getting started."

There were a few comments about challenges people faced. A few users were unclear about the link between the Learning Hub and an apprenticeship. One asked:

"Is this something education that will help [to] further our careers as an apprentice?"

Another learner commented:

"I'm confused as to what opportunities this may lead me to because some unions have outright told me they have hundreds of unemployed apprentices so it worries me where I'll end up and whether this will be relevant or I'm wasting my time. I'm completing the course blindly at this point without guarantee nor awareness of whether it will be useful or not." This learner went on to suggest that:

"Direct access to unions and apprenticeship jobs would be appreciated."

Learning Hub engagement

Additional analysis captured actual VR and non-VR user activity and engagement trends on the Learning Hub. This section provides a summary of the number of times both VR and non-VR users logged on to Build Your Skills (up to May 3, 2024), the number of courses users accessed, and types of courses they started. For VR users, we were also able describe user engagement by trade pathway (e.g., explorer, pre-apprentice, and apprentice) as well as by the provincial site they registered through. The data in this section includes user engagement data for a total of 4,754 VR and 13,089 non-VR Learning Hub users.

Times logged onto Learning Hub

The majority of users who were registered by SkillPlan did not log onto the Learning Hub (65 per cent of VR users and 50 per cent of non-VR users). About a fifth of users logged on once (17 per cent VR and 20 per cent non-VR). However, 8 per cent of VR users and 16 per cent of non-VR users logged on four or more times, demonstrating high levels of engagement.



VR user n =4,754; Non-VR user n = 13,089.

We were able to dig a little deeper into engagement levels by looking at VR users' trade pathway indicated on the intake form (i.e., explorer, pre-apprentice, and apprentice) as seen in Figure 111. Between 53 and 65 per cent of users across all three trade pathways did not log onto the Learning Hub, with the largest proportion being explorers. Nearly 20 per cent of all trade levels logged on once. A slightly lower proportion of explorers compared to pre-apprentices and apprentices logged on two, three, and four or more times. This trend suggests that, among individuals coming through the VR channels, the ones already involved in pre-apprentice or apprentice training have higher levels of engagement on the Learning Hub than explorers.



Figure 111 Number of times VR users logged on by trade pathway (n = 4,754)

Figure 112 illustrates the number of times VR users logged on by province. Across all provinces, the proportion of users who never logged on ranges from 48 per cent in Ontario to 87 per cent in New Brunswick. The number of times users logged on once was consistent across provinces as the next highest percentage, ranging from 6 to 22 per cent. Ontario and Saskatchewan users had the highest proportions logging on four or more times (16 and 12 per cent respectively).



Figure 112 Number of times VR users logged on by province (n = 4,754)

Number and type of courses accessed

Looking at the number of different courses accessed by registered VR and non-VR users who logged on at least once, we see that 22.6 per cent of VR users and 12 per cent of non-VR users did not start any courses. These users are likely accessing other resources on the Learning Hub, such as the trades information in the Explorer Hub section. A slightly larger proportion of VR users than non-VR users accessed one course compared to non-VR users (30.5 per cent vs 25.1 per cent), however more non-VR users accessed two courses (30.5 per cent) compared to VR users (17.9 per cent). Nearly one-third of both VR and non-VR users who login were highly engaged on the Learning Hub, accessing three or more courses.

We were also able to analyse the number of different courses VR users (who logged on to the Learning Hub at least once) accessed by trade pathway. In Figure 114 we see that almost a quarter of explorers and apprentices did not access any courses. Approximately 30 per cent of users from each trade pathway accessed one course, while almost 20 per cent accessed two courses. One in three pre-apprentices accessed three or more courses, compared to approximately one in four explorer and apprentice. This higher proportion of engagement for

pre-apprentices and explorers could be explained by explorers and pre-apprentices both being directed to the six foundational courses located in the Pre-Apprentice Hub.



Figure 113 Number of courses access by VR and non-VR users





Explorer n=819; Pre-apprentice n=418; Apprentice n=130 logged on at least once

We also analyzed the number of different courses of VR users (who logged onto the Learning Hub at least once) accessed across all site regions. In Figure 115 we see that approximately 20 per cent of users in all provinces did not start any courses, 30 per cent accessed one course, and 20 per cent accessed two courses. There was slightly more provincial variance in terms of the proportion of users who accessed three or more courses, representing 35 per cent in Ontario, 30 per cent in Nova Scotia, and 25 per cent in BC, Quebec, and Saskatchewan.



Figure 115 Number of different courses of VR users by province (n=1658)

It was also possible to examine the types of courses both non-VR and VR users accessed (excluding those who did not access any courses), grouping courses into subject-specific categories including: math; science; test preparation; reading & document use; diversity, equity and inclusion (DEI); preparing for a trades course; the Learning Hub "Getting Started" course; and other courses not included elsewhere.

In Figure 116, we see that math courses were the most popular among both VR and non-VR users (78 per cent and 56 per cent respectively). The next most popular type was test preparation, with 56 per cent of VR users and 47 per cent of non-VR users accessing this subject area. Science courses were also popular, where 23 per cent of VR user and 20 per cent of non-VR users accessed these courses. Some courses, such as reading and document use, DEI, and various preparing for a trades course were developed more recently, and therefore fewer users had a chance to access them.



Figure 116 VR and non-VR courses accessed in each subject area

VR users n=1,283; Non-VR users n=5,802

In summary, trends in learner engagement for both non-VR and VR users indicated that while the majority (50 and 65 per cent) of people who register for the Learning Hub never logged onto the site, those who did log on were often engaging in a variety of resources, be that courses and test preparation. Trades math courses were the most widely used, and test preparation courses were also used by approximately half of all users who accessed course material.

Usability of the Learning Hub for learners

Background

The Build Your Skills Learning Hub, hosted on the D2L Brightspace Learning Management System, has undergone several changes and expansions during Phase Two of the Virtual Recruitment project. Among the most important changes, the site was divided into three main sections for users at different stages of their learning pathway (i.e., explorer, pre-apprentice, and apprentice), courses were linked to specific trades and expanded with new modules and topics, and a form to connect to a union was added. Those changes were informed by findings and insights from Phase One of the Virtual Recruitment project and the needs analysis conducted at the beginning of Phase Two. All changes and expansions to the Learning Hub had the purpose of improving overall user experience and engagement. To better understand users' experience on the Learning Hub and collect their feedback and impressions, SRDC conducted usability testing sessions with one apprentice, one pre-apprentice, and three explorers in July and August 2023.

Overall experience and impressions

Users first heard about the Build Your Skills Learning Hub in one of multiple ways: from an instructor, by searching on the internet, or by seeing an ad or a post on social media. Most of them were still using it or had used it extensively in the weeks and months preceding the usability testing session.

Users praised the design and ease of navigation of Explorer trade pages, and the quality of information presented, including testimonials and "day in the life" videos. One user noted that the diversity of people providing testimonials made them feel represented and showed them they had a place in the trades.

Some noted the difference in look and feel between the Explorer and the Apprentice trade pages but did not find this confusing. One user commented that they had used the D2L interface in another learning context, and that familiarity with the interface made it even easier to navigate Build Your Skills. Another user said they enjoyed using the screen reading function to learn without having to read after a long day at work.

Users appreciated the variety and quality of courses and quizzes, as well as progress tracking tools such as quiz reviews and badges. Most users said that the website met or surpassed their expectations, especially with respect to courses and quizzes. They did not find other resources that provided content of similar breadth, depth, and quality on the other sites that they consulted. Most would use Build Your Skills again and recommend it to other people interested in the trades, and one already had.

Looking Great!

The overall design of the website is clear, easy to navigate, and appreciated by users. Future expansions and add-ons should aim to stay consistent with the look and feel already established on the website.

Introduction video

Many users commented that the website was easy to use and navigate, despite the fact that they did not have a demonstration or website walkthrough. While many of them used Build Your Skills completely independently (i.e., without receiving suggestions or pointers from an instructor), they had access to the "What is Build Your Skills?" video on the homepage. This short video gives a general introduction to the Learning Hub and its functionality and content. Users did not spontaneously play or comment on this video during usability testing sessions.

Take the Tour

The "What is Build Your Skills?" video provides a great overview of what the Learning Hub has to offer. However, users may skip it if they click on the user hub menu right away. To make sure that each user has a chance to see the video, it could:

- Be embedded in an email (e.g., intake message, tips to new users).
- Start to play automatically <u>the first time</u> the homepage is visited. Users should be free to stop the video and close the window if they prefer.
- Be placed above the user hub menu and/or linked in the sidebar.

Courses and quizzes

Users easily completed tasks that involved finding specific information about trades, finding information that allowed them to compare their skills and interests with what is required in a trade, and finding specific course topics, modules, and quizzes.² In the Explorer Hub, they easily navigated from exploring all trades to starting courses and developing useful skills for a specific trade. Many users had already completed several course modules and quizzes, and some were planning to complete more. One user commented that it was difficult to start a course from where they had left off. This function exists, but users may need support to find it.

Just-in-Time Help

The function to start where you left off is represented by two triangles (a fast forward button) on the top right corner of course cards. Users can benefit from finding out about this function just at the time when it is most useful for them; that is, the first time they resume a course. A pop-up window or coach-mark could be added to point out the function, using a message like: "Want to start where you left off? Click here!" Alternatively, this information could be sent in an email, as a tip to new users.

² The apprentice user only had access to a skills test, so usability testing focused on general information and functionalities.

FAQ

Users had difficulties finding general information about apprenticeships. Explorers noted that they had not looked for that information before because they felt it was too early. When asked to find the information, most users navigated to the Apprentice Hub. From there, they generally clicked on one of the trade pages, but did not find sections or menus that seemed to include general information about apprenticeships.

All users who were asked to do this task needed a prompt to navigate to the Explorer Hub and to the FAQ section. One user commented:

"If it was called something else, I would have clicked it a long time ago. [...] Like a company Frequently Asked Questions to [know] if there was an issue, like if I couldn't log in or if there was just something I couldn't figure out, I'd go there. But that's just how I move with other websites. But it seems like their Frequently Asked Questions here is more of just like information."

Other users had a similar experience and expected the FAQ to include technical support. Data available on the D₂L Insights Portal reveals that learner engagement with the FAQ was limited. Upon seeing subsections and content included in the FAQ, most users commented that it included relevant and useful information.

Key Words

Users did not recognize the FAQ section as a likely source of information about apprenticeships. Based on their experience with other websites, they thought that it included troubleshooting information about the Learning Hub itself. To avoid confusion, the section could be named "Trades Basics," "Trades 101," or any other title that avoids potentially misleading word associations and represents the content well.

This section could also be included in the Pre-Apprentice and the Apprentice Hubs. From the perspective of someone who is familiar with the trades, this information is most relevant at the Explorer stage and should be found in this section. However, the words "Pre-Apprentice" and "Apprentice" carry a strong "information scent" for users searching for information about apprenticeships (Budiu, 2020). They are powerful cues that users take advantage of to decide where they are most likely to find what they are looking for.

Connect to a union

Users had no issues finding where they needed to go to connect to a union. The link in the footer and the call-to-action button were clear and easy to find. Many users said that they remembered seeing that call-to-action before but said that they had not clicked on it yet. Some users were asked to describe what they thought would happen if they completed the form. They correctly assumed that someone from a union would receive their contact information and reach out to them, but that they would not automatically become a union member.

It is worth noting that the task instruction was "Say you would like to connect to a union. Where would you go on the Learning Hub to do that?" Outcomes might have been different if the instruction was worded to refer to the task's ultimate goal ("Where would you go to get help finding an apprenticeship?") or used wording similar to what is used in other important sources of information about trades, like SkilledTrades BC and the Education and Training Ministry of the Government of Ontario ("Where would you go to find an employer or sponsor for your apprenticeship?"). While "Connect to a Union" states the purpose of that section, users would benefit from seeing words that they recognize from other sources, including a statement of that action's ultimate goal.

Sounds Familiar

Users are likely to go on other websites to find information about the trades, including government websites and other official sources. To maximize engagement, call-to-action buttons, links, and short description of content should aim to use words and phrases that users have already seen in content related to the same topic on other websites. For example, "Connect to a Union" could be complemented by "Get help finding an apprenticeship" and "Find an employer or sponsor for your apprenticeship." This also helps strengthen "information scent" (see "Key Words" box).

Users' suggestions for additional content

When asked about what other information they would like to see on the Learning Hub, users generally commented that it was already very thorough. One user said that they would have liked to access more information for newcomers to Canada. Another said that they did not think it would be possible to cover every possible case and situation, and that other sources already provided them with that information. However, this person noted that they really appreciated content about the imperial measurement system and conversion to the metric system, because this was completely new to them and essential to progress in the trade they were interested in.

Many users said that they would have liked more information on work conditions and job outlook. One user noted that the information presented in the "Is this you?" section of the Explorer Hub used technical terms that sometimes assumed more background knowledge of a specific trade than what a typical Explorer might have. One user would have liked to see more specific information about trades in different provinces, and more information about job outlook for different trades in different provinces or regions. Finally, two users would have liked to see more information for people at different stages of their life and career, for example for people who have been studying or working in different fields and want to make a career change.

Wishlist

In summary, users suggested to add:

- Information for newcomers: Advice on taking meaningful steps to start a career in the trades while going through a settlement process; highlighting information that may be new or unfamiliar to newcomers.
- Information on job conditions and job outlook: Broken down by trade, province, and region, when possible.
- Information for people making a career change.

Opportunities for interaction

Users were asked to find different sections where they could ask for additional help on how to use the site and on learning different skills. They had no difficulty finding the chatbot included on the website. They navigated to that tool in one of multiple ways and reported that it was easy to find.

One user had tried the chatbot before, but the command they entered returned an error message. They further tested the chatbot during usability testing, and even though they wrote clear and straightforward commands, the chatbot was not able to process them. Other users who tested the chatbot used sample commands that are given as suggestions and were satisfied with the response it gave in return.

Users quickly and easily made the connection between the chat tool and asking for tutoring. However, they seemed reluctant to use that service, although it was not clear why. Concerns about costs or time commitment did not seem to be the issue. Some comments gave the impression that asking for tutoring was equivalent to making a commitment to complete training in the trades, and users were still unsure at the time of using the site. More in-depth interviews with users would be necessary to better understand barriers to access this service.

Human Touch

Chatbots are more usable when they allow users to select from sample commands and to enter free text, which is the case on Build Your Skills. However, even in best-case scenarios, the range of questions that can be understood and information that can be provided to users is limited (Budiu, 2018). SkillPlan could consider offering opportunities to interact directly with trades experts, such as:

- Webinars and live Q&A sessions with guests working in different trades.
- General information session about trades followed by small-group or individual Q&A in breakout rooms.
- Virtual job fairs with booths for different trades or provincial councils.

When asked about what was missing from the Learning Hub, one user noted that they would have liked to have more opportunities to interact with a real person. They acknowledged that it was a big ask in terms of time and resources, but it could have made a major difference for them. When asked about the possibility of having a tutor, this person said that they would have needed guidance on where to start in the trades and contact with a person who could answer questions about their own situation. To them, it felt more like mentorship than tutoring.

Maintaining engagement

At the time usability testing was done, two users were still actively using the Learning Hub. One user felt that they received all necessary help and support from other sources, and two had decided not to pursue further training in the trades. They cited different personal reasons to explain their decision. However, both of them also said that they were interested in becoming electricians, but that they were intimidated by the level of math skills required for this trade. When asked if courses and quizzes helped and if they would consider asking for tutoring, they seemed unsure that it would be sufficient to successfully complete training. They did not make plans to join another construction trade, but one said that information about Red Seal made them discover occupations that they did not know were certified trades, and that some were interesting options for them.

Take It From Me

Testimonials from people who had to overcome difficulties to succeed in the trades could serve as an inspiration for users, provide them with a roadmap to start on their learning journey, and encourage them to persevere.

Two users received information that may be incorrect or misleading from people they knew who were in the trades. For example, one user heard that unions were not currently recruiting for the trade they were interested in. This may have been true, but it could also have been specific to a region or bound to change in the foreseeable future. Another was told that unions were exclusive groups, and that people needed a formal introduction by a current member to join one. This person was skeptical that completing the "Connect to a Union" form would be personal and

formal enough for them to be considered as someone who is serious about making a career in the trades.

Myth Busters

People may receive information from various sources, some of which may be out-of-date or inaccurate. It is possible to change people's beliefs and opinions by providing them with accurate information, especially if they have not yet committed to particular beliefs. The "Trades Basics" section (currently the FAQ) could include information and facts to dispel common misconceptions.

The offer to connect to a union may be timelier for some users than for others. For example, the apprentice user was already a union member, and the pre-apprentice user was about to start an apprenticeship in a non-unionized workplace. This user said that at the time they were using the website most extensively (during preparatory training), they felt it was too early to reach out to a union. However, they said they might take advantage of the form now to access more resources and support for their next training level and to get more job opportunities in the future. Explorers had not consulted the "Connect to a Union" page prior to the usability testing session and only one of them was considering training in the trades at the time of testing.³

Now's the Time

To maximize engagement, it is important to make the right offer at the right time (Nielsen, 2011). On a website where users are expected to return and progress on a training journey, this may involve defining key milestones and sending the offer when they are reached (e.g., sending an offer to connect to a union after completing at least one course) and/or sending reminders. For users who are at the beginning of their training journey, it may also be important to dispel myths and provide them with accurate information about the timeline and order of important steps (see the "Myth Busters" box).

The pre-apprentice had completed several courses and was planning to complete more once they were done with their practical training. They said that they lacked the time and energy necessary to keep learning at the same pace as they did when they first signed up. They also said that they tended to complete modules all the way to the end instead of exploring different sections:

"I kind of get tunnel vision, and once I'm like here, I gotta finish this first."

³ This was the same user who was told that they needed a personal introduction from a union member to join a union. Furthermore, they were interested in drywalling, but this option was missing from the list of trades on the "Connect to a Union" form.

This user had also discovered effective shortcuts (e.g., My Courses section, waffle menu listing courses that they were enrolled in) that made navigation to courses and quizzes quicker but that prevented them from coming across other sections that might have been relevant. For example, they were very effective at using the footer to look for key pieces of information, but they noted that they had forgotten about the "Connect to a Union" link, or rather that they had stopped noticing it after spending some time on the website. In the Pre-Apprentice hub, the option to connect to a union is presented as a blue hyperlink towards the bottom of the page, and in the footer. In the Explorer hub, it has its own box and call-to-action button in addition to being included in the footer. In the Apprentice hub, it is only included in the footer.

Friendly Reminder

As a tool that helps users progress along a training journey, the Build Your Skills Learning Hub has the potential to build a strong base of returning users. To support longterm engagement, users need to be re-engaged using well-timed and relevant information. For example, Explorers could receive alerts about pre-apprenticeship program enrollment; Pre-Apprentices could be sent a reminder to connect to a union if they haven't done so yet; Apprentices could receive information about the Red Seal. Users can find short-cuts and learn to ignore information that is not immediately relevant to them. Reminders help them discover or rediscover useful resources as their goals and motivations change.

Summary

The Build Your Skills Learning Hub is a useful resource that meets the needs of people interested in the trades and those who are in the process of completing training. The site has already built a large user base of Explorers, Pre-Apprentices and Apprentices from all over the country. The suggestions laid out in this report can inform future developments that contribute to expanding and maintaining user engagement on Build Your Skills.

Here is a summary of suggestions for the Build Your Skills Learning Hub:

- Keep the same look and feel for new sections and content (see "Looking Great!" box).
- Make sure each user has an opportunity to see the "What is Build Your Skills?" introductory video (see "Take the Tour" box).
- Provide information on how to jump to the next course module the first-time users resume a course (see "Just-in-Time Help" box).

- Rename the FAQ to something that users will recognize as a source of general information about the trades; consider including this section in all three user hubs (see "Key Words" box).
- Use words and phrases that users have already seen in connection to apprenticeships to help them find and understand the purpose of the "Connect to a union" form (e.g., "Get help finding an apprenticeship," "Find an employer or sponsor for your apprenticeship") (see "Sounds Familiar" box)
- Consider adding content suggested by users: Information for newcomers; information on working conditions and job outlook in different trades, provinces, and regions; information for people making a career change (see "Wishlist" box).
- Provide opportunities for users to interact directly with trades experts (see "Human Touch" box).
- Add testimonials from people who had to overcome difficulties to succeed in the trades (see "Take it From Me" box).
- Provide accurate information to dispel common myths and misconceptions about the trades (see "Myth Busters" box).
- Identify key milestones in the user training journey and align them with offers to make sure they are made in a timely manner (see "Now's the Time" box).
- Re-engage with long-time users at key points of the learning journey to help them discover or rediscover useful resources and pieces of information (see "Friendly Reminder" box).

SkillPlan and their partners can review these suggestions and consider integrating them to the Learning Hub. Other usability testing sessions could be conducted to measure the impact of these changes on usability and engagement.

Usability of the Learning Hub for instructors

The evaluation also gathered feedback from a small sample of trades trainers and other individuals promoting trades training to learners. Data was collected through the Learning Hub intake survey of new users to the Learning Hub, along with a small number of interviews. This information provided initial insight into how training providers and promoters (e.g., trades instructors, program coordinators, high school teachers, etc.) learned about the Learning Hub, and intended to use and/or were currently using the Learning Hub. As only seven instructors

coming through VR channels completed the intake survey, this section reports on training providers from both VR and non-VR recruitment channels.

As of April 2, 2024, a total of 41 trades training providers completed the intake survey. Figure 117 illustrates the ways that instructors heard about the Learning Hub. The most common ways that instructors heard about the Learning Hub was through word-of-mouth from SkillPlan, conferences, or from a friend or colleague (33 and 21 per cent). Training providers also heard about the Learning Hub online from a trade-related website (19 per cent) and from social media (14 per cent).

Figure 117 How instructors heard about the Learning Hub (%)



Graph includes responses from 41 instructors.

Table 8 presents the reported likelihood training providers will use the Learning Hub for a series of potential reasons. We see that 90 per cent of training providers said they were likely or very likely to explore the site to become familiar with the courses and material offered. Another 86 per cent reported that they were likely or very likely to share course materials from the site with their students, while 83 per cent were likely or very likely to recommend all of their students visit the site. In general, a smaller proportion of training providers said they were likely or very likely to *require* their students visit the site, complete an assessment, or complete a course as part of their training (76, 65 and 62 per cent respectively). This suggests that the Learning Hub was seen as a supplement to training courses rather than a required part of training.

Training providers were also asked to give their impressions of the usability of the Learning Hub (see Table 9). They rated the usability of the Learning Hub highly, with 91 per cent agreeing or strongly agreeing that the information on the site was relevant to them. 88 per cent of trainers agreed or strongly agreed that it was clear how to use the site, while 87 per cent agreed or strongly agreed that accessing different courses was easy. In total 84 per cent agreed or strongly agreed that the layout of the site was well organized, and 81 per cent agreed or strongly agreed that they found the content on the site useful.

Table 8 Training provider intentions for the Learning Hub

Tra	iners who were likely or very likely to undertake the following activities:	%
\checkmark	Explore the site to become familiar with the courses and material offered.	90%
\checkmark	Recommend some of my students who needed more support visit the site.	90%
\checkmark	Share course material from the site with my students.	86%
\checkmark	Recommend all my students visit the site.	83%
✓	Require students visit the site as part of their training.	76%
✓	Require students complete a Learning Hub assessment as part of their training.	65%
\checkmark	Require students complete a Learning Hub course as part of their training.	62%

Table 9 Training providers' impressions of the usability of the Learning Hub

Tra	iners who agreed or strongly agreed with the following statements:	%
\checkmark	The information on the site is relevant to me.	91%
\checkmark	It is clear how to use the site.	88%
\checkmark	Accessing different courses is easy.	87%
\checkmark	The layout of the site is well organized.	84%
\checkmark	Overall, I am satisfied with the design of Build Your Skills.	82%
\checkmark	I find the content on the site useful.	81%
\checkmark	Navigating the site is straightforward.	79%
✓	I am able to access technology support when needed.	67%

Comments from training providers

The comments that training providers shared on the intake survey were overwhelmingly positive. Several respondents stated that they were "excited to use these resources" and were thankful to have access to the Learning Hub.

One trainer commented on the value for both early apprentices and those preparing for their Red Seal:

"I have found the hub very useful so far with my 1st year class, it's a great upgrading app for math. Also used exam anxiety and Red Seal lessons for my 4th year graduating class and it was well received by students."

A couple trainers commented that the content they viewed was useful, though basic, and particularly helpful for those new to trades:

"It looks like the start of something great. It needs a lot more content, especially on topics beyond a beginner level. I'm interested to check back later to see how this grows."

One teacher stressed the value of this resource for high school students:

"What an amazing resource. Thank you for creating this. This is especially beneficial for high school students that say "I don't need this for the field of work I want to go into..." especially for kids that want to go into the trades. Definitely share this with high school teachers. If I hadn't attended Skills Canada with my students, I would have never heard of this amazing resource. Please continue developing it. As well, if you could include segments on the importance of written communication skills etc. that would be great!"

From the interviews with training providers, we learned that their students at all levels struggle with math:

"Our learners tend to struggle with math and the questions related to math used directly in their trade. [The SkillPlan resources] are very relevant to an apprentice trying to pass the Red Seal."

A common theme from the interviews were the value of having trades-related math and science resources, which are often challenging to find:

"I think it's authentic, it's relevant and it is meeting the needs of the students."

There were also a couple of notable suggestions from training providers who completed the intake survey. One instructor commented:

"It is a fantastic resource for students considering a career in the construction trades. I would love to see something similar for motive power trades - specifically, AST even though it is not a building trade. Students desperately need help with the math components of the trades."

Another training provider stated:

"I have been using SkillPlan products for years and this is another great product. More young pre-apprentices and apprentices should be aware of this and other products available."

DISCUSSION

OVERVIEW OF PHASE TWO ACHIEVEMENTS

Phase Two of the Virtual Recruitment project has accomplished several objectives that expanded the recruitment capacity of provincial partners and ensured that more explorers, preapprentices, and apprentices can access information and learning resources, as well as find information and support to connect to unions and learning opportunities.

Compared to Phase One, this phase of the project markedly refined the social media and advertising strategy through developing an array of original assets and innovative techniques that could reach new audiences and diversify their engagement through marketing various types of virtual recruitment resources. Five separate social media and advertising campaigns managed by SkillPlan—each with different aims, content, and target audiences—were implemented throughout Phase Two. In addition to these national campaigns, multiple provincial partners ran their own provincial paid campaigns that increased awareness about the unionized construction trades in their region and the resources available on their unique provincial Construction Trades Hub site. Along with paid campaign content, SkillPlan provided a repository of organic social media content that partners could use to engage their network.

The network of provincial Construction Trades Hub sites also expanded over Phase Two of the project. Regional sites were launched in New Brunswick, Nova Scotia, and Newfoundland and Labrador in fall 2023 just as new social media campaigns were launching that could drive traffic to these sites. Existing provincial sites were redesigned to improve navigation and enhanced content. The three major changes to the sites were:

- The development of separate Build Your Skills Learning Hub information and sign-up pages. The Learning Hub information page now includes an introductory video, a list of key resources, and contact information for SkillPlan's Support Team.
- A re-designed Connect to Unions page that emphasizes the benefits of joining a union (e.g., "excellent pay, pension, and benefits"). This page includes a testimonial video with union members also discussing these and other benefits. Near the end of this phase, a connect to a local union form was also added to provide an opportunity for regions to connect with people interested in learning more about union and training opportunities.
- Group specific landing pages with content specially designed for women, youth, and newcomers. Instead of driving all traffic to a general homepage, certain users were guided to these alternative pages if they clicked on a targeted ad. While regular users cannot

navigate to these landing pages from the site itself, it provides provincial partners targeted site content that they can use in future campaigns.

Along with these redesigned features, all provincial sites were transferred to their own unique website domain, which provided greater control to regions in terms of creating customized features. These unique features include: Ontario's "Apprenticeship Navigator," which allows users to search for and apply to apprenticeship opportunities by trade and region; and British Columbia's "Speak to an Advisor" sign-up form, which connects users to an advisor who can provide more information on how to connect to available employment and training opportunities.

This phase also launched the new Build Your Skills Learning Hub that provided access to information on different trades, course material, assessments, and other resources for explorers, pre-apprentices, and apprentices. Along with the development of new resources, the redesigned Learning Hub offered pathway navigation improvements that could lead users to the best set of learning material depending on their pathway. Social media and advertising campaigns, network engagement, and organic traffic, expanded the number of users throughout this phase of project. Virtual recruitment users who logged on to the Learning Hub found and accessed course material to support their learning needs.

Overall, this phase of the project has greatly expanded recruitment resources compared to the first phase with new and updated advertising strategies, provincial sites, and learning resources. As the next section will explore, key findings suggest that the project is finding greater levels of success in terms of both user expansion and engagement.

KEY RESULTS AND LESSONS

Social media outcomes

Compared to the first phase of the project, both organic social media posts and paid advertising campaigns increased in their capacity to drive traffic to the provincial sites throughout Phase Two. There were more campaigns and assets that ran on a greater number of platforms, as well as refined campaign strategies that could better target unique audiences. The SkillPlan-led advertising strategy resulted in millions of impressions and over 348,000 clicks on campaign ads (excluding TikTok's Pangle network), while regional campaigns bolstered these numbers even further.

As the finding section described, certain organic and paid social media posts attracted more engagement than others. In terms of post type, both graphic and video assets typically had more views and clicks than carousel ads. Successful ads and posts typically had simple and clear messaging, an unambiguous call to action, and images of diverse trades people. Assets that began with open-ended questions and strong hooks also performed well. The results also suggested that videos with engaging music that featured a diversity of trades had high engagement. Without further research (e.g., A/B testing), however, it is difficult to know what exact asset features increased engagement and clicks. As results from both provincial partners and national campaigns suggested, consistency in messaging, frequency of posts, and diversity of content (e.g., such as the approach by Conseil Provincial du Québec des Métiers de la Construction of featuring different trades) was a

Social media and advertising highlights

- Five national campaigns generated millions of ad impressions and over 348,000 clicks on campaign ads.
- TikTok ads had the greatest reach and clicks, but users from this traffic source had lower levels of site engagement compared to other platforms.
- Phase Two social media and advertising campaigns were overall effective at generating traffic across provincial sites, especially in terms of engaging trades explorers and individuals from underrepresented groups.

strong overall approach to virtual recruitment marketing campaigns.

This phase of the project explored advertising on a greater array of different platforms, including TikTok advertising. As the social media and advertising outcomes section explored, the number of impressions and clicks were often highest on this platform compared to those of Facebook, Instagram, YouTube, and LinkedIn. Due to the identification of traffic from TikTok's Pangle network in campaign one, however, the presence of bot traffic may have had an impact on these metrics. While Google Analytics and other data providers have automatic filtering mechanisms that may have blocked some of this traffic, it was not possible to verify the exclusion of all bot traffic with the available web analytic tools. Of note, 50 per cent of all web traffic is estimated to be internet robots, web bots, or crawlers and it is not always possible to identify this traffic (Suchacka & Iwański, 2020).

A key lesson in this phase of the project was to pay close attention to user activity from various traffic sources. For example, in campaign one, ongoing monitoring detected that the vast majority of TikTok traffic was landing on the national site, but not navigating to a provincial site. Monitoring engagement activity allowed us to identify that much of this traffic was from TikTok's Pangle network, which we could then disable for the remainder of the Phase Two advertising campaigns and exclude from future campaigns. Nevertheless, results from other campaigns suggested that TikTok traffic continued to be less engaged once they landed on the site. For example, in campaign four, while TikTok users represented 28 per cent of traffic on Learning Hub information pages, it only represented 4 per cent of traffic on the sign-up page as transition rates were much lower than traffic from other platforms.

The social media and advertising campaigns were overall effective at generating traffic across sites and engaging new users to explore resources and take the next step in their skilled trades

pathway. This was especially the case in reaching the target audience of those exploring the skilled trades, who were overrepresented in the virtual recruitment user population who signed up for the Learning Hub compared to those who came from other recruitment channels. As the intake survey results also showed, many of these users were from underrepresented groups.

Provincial Construction Trades Hub outcomes

During Phase Two, new provincial sites were launched in New Brunswick, Nova Scotia, and Newfoundland and Labrador, and all sites were updated with new content and layouts. Site updates included redesigning information pages related to the Learning Hub and provincial unions, as well as creating group-specific landing pages for women, youth, and newcomers that were used in campaign three.

Overall, sites received a high level of traffic from a range of referral sources (e.g., social media, web search traffic). Almost 733,000 new users visited a national or provincial Construction Trades Hub site between January 2023 and March 2024. Among them, 325,892 new users came to the national landing page, while the remainder visited a specific provincial site. While the number of new users on the national Construction Trades Hub site was high, the results found that the majority of this traffic was from paid TikTok ads during campaign one and two, and only a few of these users navigated to a provincial site. This learning early in the project helped alter the direction of later campaigns, which directed users to their respective provincial sites instead of the national landing page. Without paid ads directing users to the national page, traffic to this site was minimal in the second half of Phase Two.

Microsite highlights

- Over Phase Two, 325,000 new users visited the national Trades Hub, while over 407,000 new users visited regional microsites.
- The majority of microsite traffic originated from paid advertising sources, although some regions gained a number of new users from partner websites and organic social media posts.
- Paid campaigns drove traffic patterns on sites, with users from these sources more or less likely to visit certain areas of a microsite depending on where they were directed.

The outcome section showed that users originated from a variety of referral sources and that provincial sites had a diverse array of traffic. During social media campaign periods, the number of new users originating from this traffic source was high (as was to be expected), but other traffic sources (e.g., web search, partner websites) also increased over Phase Two. For example, in Alberta, Quebec, and Ontario, traffic from organic social media posts incrementally increased in the second half of Phase Two. During this period web search traffic also grew, largely driven from implementing paid search ads in campaigns four and five. Engagement on each provincial site in terms of page views varied considerably, largely dependent on the features of each provincial site and where social media campaigns drove traffic. For example, in Ontario and Quebec, the largest number of page views were trades pages. In Quebec, this was driven by traffic from paid social media sources, while in Ontario it was driven by direct and trades partner sources. For several sites, the Learning Hub information page received the greatest number of views (e.g., Newfoundland and Labrador, Nova Scotia, Manitoba, Saskatchewan, Alberta, and British Columbia), which was the landing page for campaign two and four. This showed that paid campaigns largely drove traffic patterns on provincial sites over Phase Two.

Learning Hub outcomes

Redesigning the user engagement pathway led to a simpler and more streamlined process to register for the Build Your Skills Learning Hub. Removing Magnet's intermediary portal meant that users could sign-up directly to the Learning Hub on provincial sites and quickly receive their log-in details to start exploring the resources. Over Phase Two, 4,790 people signed up for the Learning Hub from provincial sites, with another 890 registering through the SkillPlan website form. Among virtual recruitment users who signed up, 35 per cent logged on to the Learning Hub at least once.

According to the intake survey data, the virtual recruitment strategies were successful in drawing both explorers and underrepresented groups to the Learning Hub to learn more about careers in the trades and access learning and assessment material. Among virtual recruitment users who completed the intake survey, 71 per cent identified themselves as exploring the trades. The survey results also showed that more newcomers to Canada and racialized groups came to the Learning Hub through virtual recruitment channels compared to other Learning Hub recruitment methods. Indeed, 56 per cent of virtual recruitment survey respondents were newcomers to Canada.

Learning Hub highlights

- Almost 4,800 people signed up for the Learning Hub from a provincial microsite between January 2023 and March 2024.
- Among those who signed up, 35 per cent logged onto the Learning Hub at least once.
- Intake survey data showed that the virtual recruitment strategies were successful in drawing underrepresented groups to the Learning Hub.
- When virtual recruitment users did log on, they had high engagement with course material, particularly with math courses and assessments.

The Learning Hub results showed that 65 per cent of users who completed the virtual recruitment registration form never logged onto the platform. This does not necessarily reflect the quality of the Learning Hub and could rather be related to learner characteristics such as motivations for engagement and prior subject knowledge. Research conducted on Massive Open

Online Courses (MOOCs), free online courses promoting self-directed learning similar to the Learning Hub, has found that only a small percentage of people who enroll complete MOOCs. Understanding participants' preliminary expectations and motivations, and what prior subject knowledge they have, may be required to succeed in the course may help boost participant engagement (Watted & Barak, 2018). There is an opportunity to reach out in the future to people who do not log in to find out more about their needs.

Once virtual recruitment users logged on to the Learning Hub, however, they had relatively high engagement levels in courses, particularly in the multiple math and assessment options available. The re-design of the Learning Hub itself and the attention given to functionalities highlighted by users in Phase One and project partners in the needs analysis likely contributed to this increase in user engagement in Phase Two. As the Learning Hub engagement section highlights, virtual recruitment users who logged on to the Learning Hub were accessing and using the learning resources on a comparable basis to other types of users, including those using the platform as part of in-person training.

Through Phase Two, getting feedback directly from learners and instructors through multiple channels was a useful way to paint a more complete and nuanced portrait of users, their goals, and their preferences. It showed that the breadth, depth, and quality of learning content provided on the Learning Hub makes it a unique resource for people who want to make a career in the trades as well as instructors who are looking to find supports for their students. No matter their career stage when they create an account, users will find both resources suited to meet their immediate needs and resources that will encourage them to keep coming back to the platform as they progress on their training journey. As the usability testing explores, users often still want to be able "to speak with a real person." Resources like tutoring and contacts with union advisors are key assets to encourage people to join the trades and promote their long-term success in the sector.

FUTURE PLANS

The Virtual Recruitment project has built and established a range of resources to increase knowledge about different trades and provincial opportunities, as well as promote enrollment, retention, and completion of trades training. Importantly, the general steps to starting training or joining a union are not well known by the larger public. The Virtual Recruitment project has established itself as a way to reach a large number of people across all provinces to share essential information so people can take meaningful steps towards starting a career in the skilled trades.

While virtual recruitment resources have been successful in reaching new audiences, the project has not yet been able to track how many of these individuals go on to join a union or initiate

steps towards starting a career in the skilled trades sector. In terms of moving from interest to action, connecting with a union or training opportunity is the most complex part of the recruitment process, one that may require both technical and human interventions. Indeed, over Phase Two, partners began to implement new ways to connect with users to help provide this type of support. In particular, the majority of provincial sites implemented a "Connect to a Union" sign-up form for people who were interested in learning more about employment and training opportunities. While it was not possible to collect information on the outcomes of users who engaged with this form in Phase Two, future phases of the project will implement and evaluate new approaches to supporting pathways to training and employment.

Broadly, the overall goal of the project is to further refine recruitment and learning tools so potential recruits can more easily find and apply to skilled trades opportunities, be that connecting with a union or beginning pre-apprenticeship or apprenticeship training. With a range of online resources now established across Canada, the project seeks to better understand the barriers interested users face in initiating steps towards apprenticeship training and union membership. Future phases of the project will explore possible solutions to overcome these barriers and generate evidence on what recruitment strategies are most feasible and appropriate for wider implementation across Canada.

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