





Future Skills Centre

Evaluation of ELITE's Program for Black Youth

500-294 Albert St, Ottawa, ON. K1P 6E6 admin@malatest.com 1.888.689.1847

malatest.com

This report was produced as part of a project funded by the Future Skills Centre (FSC), with financial support from the Government of Canada's Future Skills Program.

FSC is a forward-thinking centre for research and collaboration dedicated to preparing Canadians for employment success. We believe Canadians should feel confident about the skills they have to succeed in a changing workforce. As a pan-Canadian community, we are collaborating to rigorously identify, test, measure, and share innovative approaches to assessing and developing the skills Canadians need to thrive in the days and years ahead. The Future Skills Centre was founded by a consortium whose members are Toronto Metropolitan University, Blueprint ADE, and The Conference Board of Canada

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















Executive Summary

The Future Skills Centre has funded the Experiential Learning in Innovation, Technology, and Entrepreneurship (ELITE) Program for Black Youth since 2021 to increase job readiness of Black youth for careers in science, technology, engineering and mathematics (STEM) under the thematic priority of inclusive economy. The ELITE Program nurtures their talents through paid internships, developing entrepreneurial skills and supporting their wellness as individuals.

R. A. Malatest & Associates conducted an independent rapid evaluation of the project to assess the extent to which project objectives were met and, where possible, to assess the impact of project activities on the short-term outcomes associated with the project. This evaluation collected data through a survey of participants, and semi-structured interviews of participants, staff, Steering Council members, and program partners. This document summarizes the evaluation's design, methods, results and implications.

Key Findings

Overall, the ELITE Program is achieving many of its intended outcomes, and is demonstrating progress on others. Almost all ELITE Program participants interviewed and surveyed remain interested in STEM careers (95% of survey respondents) and some have taken academic and career steps towards that end. Participants agree that the holistic approach of incorporating paid internships, the Entrepreneurship Design Series and the Wellness and Coaching Series has enhanced their job readiness and growth as individuals. The most useful skill development reported by participants was learning how to network (88% of survey respondents). The program is well on its way to improving labour market outcomes for Black youth.

In terms of inclusion, the program is offered to a diverse group of Black youth, though the participation of people with disabilities is lower than the general population. Some consideration of why newcomers seem to be less inclined to apply for STEM jobs and further internships should be made. The ELITE Program is delivered by Black professionals, who act as advocates, mentors, and role models, and allow for safe discussions around mental health.

Adapting the program each year, based on internal feedback loops, effectively serves student needs and should be viewed as an example of effective program planning for other organizations working on similar projects.

Recommendations

To ensure that the ELITE Program is as inclusive as possible and to ensure that the program tracks its impact on participants, the ELITE Program should:

• Consider whether there are any barriers for newcomers to progress within STEM employment and internships.



- Consider whether there are any barriers for people with physical, mental, and learning disabilities to participate in the program.
- Gather data about when participants first became interested in a STEM career (whether it was
 through the ELITE Program or prior). Socio-economic status and family history of university
 education would also be relevant data to determine if the program is reaching Black youth who
 face multiple barriers.
- Track participants' career journeys in a longitudinal study as part of the program's ongoing activities
- Involve internship hosts in the evaluation process to provide a more comprehensive understanding of Black youth's transition into the labour market.



Table of Contents

1. Project Objectives, Activities and Anticipated Outcomes	6
1.1 Activities	6
1.2 Rationale	6
1.3 Logic Model	7
2.1 Key Evaluation Questions	8
2.2 Lines of Evidence	9
2.3 Evaluating Equity, Diversity, Inclusion and Reconciliation	12
2.5 Limitations	12
3. Findings and Analysis	14
3.1 Findings around Program Development	14
3.2 Summary of Program Impacts and Outcomes	15
3.3 Impacts from Program Activities	18
3.3.1 Internship	18
3.3.2 Entrepreneurship Design Series	19
3.3.3 Wellness and Coaching Series	22
3.4 Outcomes	23
3.4.1 Interest in STEM	23
3.4.2 Remaining Challenges	24
3.5 EDI&R Findings	26
3.5.1 Program Diversity	26
3.5.2 Newcomers May Face Continuing Challenges	28
3.5.3 Women may have benefited Less from the Program	30
4. Suggestions, Recommendations and Implications	33
4.1 Stakeholder Suggestions	33
4.2 Recommendations	34
4.3 Implications for FSC, for Other Funding Organizations and for Organizations	
Program for Black Youth	
Appendix A: Works Cited	36



Appendix B: Logic Model	37
Appendix C: Evaluation Matrix	38
Appendix D: Job Readiness Questionnaire	42
Appendix E: Semi-structured Interview Guide for Participants	53
Annendix E: Semi-structured Interview Guide for Staff and/or Partners	5/



Table of Figures

Figure 1: Enrollment in the ELITE Program for Black Youth	€
Figure 2: Participants and Response Rate by Line of Evidence	g
Figure 3: Survey Respondents by Participant Group and Year, Compared to Enrollment	10
Figure 4: Interview Participants by Participant Group and Year, Compared to Enrollment	11
Figure 5: Summary of Outcomes	17
Figure 6: In what ways was the internship experience helpful?	18
Figure 7: The internship experience made me more job-ready	19
Figure 8: The Entrepreneurship Design Series enhanced my business skills or knowledge	20
Figure 9: Entrepreneurial Design Series benefits	
Figure 10: Ways the Wellness and Coaching series were helpful	22
Figure 11: The Wellness and Coaching series supported me to grow as an individual (assistants vs	•
associates)	23
Figure 12: Since completing the ELITE Program, Assistants vs. Associates	24
Figure 13: The most relevant challenges	25
Figure 14: Survey participants from equity-seeking groups	27
Figure 15: Newcomers vs. Non-newcomers in STEM	28
Figure 16: Ways the Entrepreneurship Design Series was helpful, newcomer vs. non-newcomer	29
Figure 17: Skills, knowledge, strengths and resources, which have been helpful to pursue career g	oals,
newcomers and non-newcomers	30
Figure 18: Ways the Wellness and Coaching Series was helpful, Women vs. Men	31
Figure 19: Most Relevant Challenges, Women vs. Men	



1. Project Objectives, Activities and Anticipated Outcomes

The Experiential Learning in Innovation, Technology, and Entrepreneurship (ELITE) Program aims to support Black Youth by building the hands-on skills, knowledge, and resilience needed to chart pathways to careers in science, technology, engineering, and mathematics (STEM). Specifically, the program:

- Enhances technical skills,
- Addresses specific challenges of racism faced by Black and racialized youth and maintaining wellness in a holistic way, and
- Hosts a training platform to create an entrepreneurial mindset in Black youth.

1.1 Activities

The ELITE Program for Black Youth began in 2021 and has run for four consecutive summers. Each year the program welcomes two cohorts of participants: high school students (assistants) and university undergraduate students (associates).

2021 2022 2023 2024 Total* **Assistants (High** 20 21 14 15 79 School students) **Associates** (Undergraduate 18 31 31 13 93 students) **Total Enrollment** 39 51 28 45 163

Figure 1: Enrollment in the ELITE Program for Black Youth

The program developed these youth through three sets of activities:

- **Hands-on Work-Integrated Training**: Paid experiential work internships that provide nuanced targeted training to students in their STEM fields of interest.
- **Entrepreneurship Design Series**: A series of workshops, pitch presentations, and group activities that provide training in entrepreneurship, financing, leadership, teamwork, and communication skills.
- Wellness and Coaching Series: A series of group meetings led by a registered psychologist and facilitated by graduate counselling students that involve presentations, group activities, and coaching on building mental health and wellness-enhancing knowledge and skills.

1.2 Rationale

As FSC mentions in their 2024-2025 thematic focus area of inclusive economy, Black youth face higher unemployment rates, are overrepresented in lower paying jobs, and earn lower earnings than their non-

^{*}Some individuals participated in more than one year.



Black peers. Black Canadians are also noticeably underrepresented among professionals in high wage and emerging technology careers (such as AI, manufacturing, quantum technologies, regenerative medicine and renewable energy systems) and are less likely to be entrepreneurial innovators. Together these trends form barriers to their upward socio-economic mobility and that of their communities. Barriers to Black participation in high-technology professions and in entrepreneurship are associated with higher levels of pursuit of opportunities in less lucrative sectors, lack of mentorship and advocacy, reduced financial literacy and deficiencies in awareness of system supports.¹

The media have picked upon these trends. The media has reported on the need to open doors to Black Youth into STEM careers. One article reported that many Black Youth feel isolated and discouraged in school because they lack Black teachers and mentors. Organizations such as the Canadian Black Scientists Network are working to raise awareness of the problem by analyzing data from Statistics Canada and relating the experiences of Black students.²

The education system is also starting to respond. A number of universities have implemented STEM programs for Black youth, but they are all after-school type programs for kindergarten to high-school students (York University, University of Waterloo, Queen's University, University of Northern British Columbia). None of these incorporate a paid internship model.

This project addresses barriers to Black youth's entry into high-paying STEM careers by providing experiential training in STEM skills, by fostering professionalism, by nurturing interpersonal relationship skills, and by developing awareness of mental health strategies and resources. Further, it aims to provide participants with the job experience and networks required to open doors to STEM careers. The goal is to increase the number of Black youth pursuing STEM fields in university and acquiring high-paying jobs after graduating.

1.3 Logic Model

The ELITE Program supports Black youth on building hands-on skills, knowledge, and resilience through experiential learning and work-integrated training for STEM-related careers. The program targets Black youth between 15 and 22 (in particular, high school, college and university students). Participants receive paid internships ranging from 8 to 16 weeks, leadership and entrepreneur training, and mental health supports. The ELITE Program's logic model, which can be found in Appendix B, describes the program's inputs, activities, outputs, and anticipated outcomes. Although the logic model specifies its intended short-term and long-term outcomes, only short-term outcomes are evaluated in this report. Long-term outcomes need more time to come to fruition and could be measured during a later evaluation.

¹ (Hancock, 2021)

² (Wong, 2022) See also (The State of Black Canadians in STEM, 2022) and (Danby, 2024)



2. Methods

The project involved a rapid evaluation to assess the extent to which project objectives were met and, where possible, to assess the impact of project activities on the longer-term outcomes associated with the project. The evaluation:

- Assessed the effectiveness of the supports provided to Black youth through the ELITE Program.
- Incorporated both qualitative and quantitative methods and included the collection of benchmarking data where possible.
- Collected data in September and October of 2024.
- Summarized the findings into this report. When qualitative data is reported without specific numbers, 'most' refers to over 50%, 'some' refers to 25-50%, 'a few' refers to under 25%.

2.1 Key Evaluation Questions

Eight key evaluation questions were developed in collaboration with ELITE Program to respond to Future Skills Centre's three thematic priority and focus area questions for Black youth. These questions formed the basis for survey and interview questions, as well as the results summarized in this report.

What works, for whom and in what context to improve labour market outcomes for Black youth?

- What skills, knowledge, resources, and strengths obtained during the ELITE Program were helpful for managing the challenges encountered during the transition to work life?
- What additional skills, knowledge, resources, and strengths can make transition to work life easier?
- How does the experience obtained through the ELITE Program affect Black youths' career pursuit over the years after completing the Program?
- How have the targeted wrap-around activities offered by the ELITE Program supported youths' transition to work life and the workforce?

What works, for whom and in what context to address anti-Black racism in workplaces and skills and training organizations?

- What are some of the challenges for Black youth seeking STEM careers during their transition to work life and the workforce (i.e., employment search, early years of work experience)?
- What is unique about the design and execution of the ELITE Program that makes it effective in supporting Black youth in overcoming these challenges?



How do we mobilize knowledge about what works to improve labour market outcomes for Black youth and to address anti-Black racism in workplaces and skills and training organizations?

- What recommendations for improving support programs for Black youth emerge from evaluating the ELITE Program?
- What lessons learned from the ELITE Program can be shared to improve similar programs?

2.2 Lines of Evidence

The evaluation answers these questions through multiple lines of evidence, including a survey of program participants, interviews with program participants, and interviews with ELITE Program staff, its Steering Council and its partners (see Figure 2). Together these lines of evidence gathered benchmarking data for the program and to inform recommendations for improving it. This information will be assessed for its contribution to FSC's thematic priorities of labour market outcomes for Black youth and anti-Black racism in the workplace and skills and training organizations. The lines of evidence are summarized below.

	Job Readiness Survey	Participant Interviews	Staff and Partner Interviews
Participated	46	16	6
Invited	150	46	10
Response Rate	31%	35%	60%

Figure 2: Participants and Response Rate by Line of Evidence

Job Readiness Survey (developed by the ELITE Program and Malatest, administered by Malatest)

- **Respondents**: 46 individuals who participated in the ELITE Program for Black Youth sometime during 2021-2024 completed the survey.
- Information collected: Survey questions focused on challenges and resources in pursuing STEM
 careers for Black youth, skills and knowledge acquisition through the ELITE Program, and
 perceived job-readiness after completion of the program. (See questionnaire available in
 Appendix D).
- **Sampling**: Malatest provided Malatest-hosted registration and consent form links to the ELITE Program to distribute to current and past participants of the program. In total, 150 individuals were invited to take the survey (for a gross response rate of 31%). Those that consented to participate were subsequently provided with an invitation email that contained a link to access the online questionnaire. The resulting 46 respondents fairly represent participation by year and



group. They may slightly overrepresent more recent years, for instance 24% of respondents participated in 2024, compared to 17% of participants (See Figure 3).

Figure 3: Survey Respondents by Participant Group and Year, Compared to Enrollment

Group	2021	2022	2023	2024	Total*	% of respondents	Response rate***
Assistants (high school students)	7	2	7	7	23	50%	33%
Associates (university students)	2	9	13	4	28	61%	30%
Total	9	11	20	11	46		
% of respondents**	20%	24%	43%	24%		-	
Response rate***	23%	24%	39%	39%			

^{*5} respondents completed the ELITE Program as assistants and associates. In data discussed in this evaluation they are counted as Associates when a distinction is made.

Participant interviews (developed by the ELITE Program and Malatest, administered by Malatest)

- *Respondents:* 16 individuals who participated in the ELITE Program for Black Youth sometime during 2021-2024, and who had completed the Job Readiness survey, completed the interview.
- Information collected: Interview questions focused on deeper insights into challenges and resources in pursuing STEM careers, skills and knowledge acquisition through the ELITE Program and perceived job-readiness after completion of the program. (See interview guide available in Appendix E).
- *Sampling*: The sampling strategy was the same as for the survey above. After **completing** the job readiness survey, participants were asked if they would be willing to be part of the interview process. Those who answered "yes" were invited to an interview. 21 survey respondents were invited to an interview. The 16 respondents accurately represent participation by year, but seem to overrepresent assistants. 63% of interview respondents were assistants, versus 48% of participants (See Figure 4).

^{**}Sum of percentages exceeds 100% due to some respondents participating in more than one year.

^{***}Proportion of total respondents from total participants (see Figure 1).



Figure 4: Interview Participants by Participant Group and Year, Compared to Enrollment

Group	2021	2022	2023	2024	Total*	% of respondents	Response rate***
Assistants (high school students)	4	2	3	1	10	63%	14%
Associates (university students)	0	2	2	3	7	44%	8%
Total	4	4	5	4	16		
% of respondents**	25%	25%	31%	25%		•	
Response rate***	10%	9%	10%	14%			

^{*1} participant completed the ELITE Program as an assistant and as an associate.

ELITE Program staff and/or partner interviews (administered by Malatest)

- Respondents: 6 staff or partners in the delivery of the ELITE Program completed the interview (3 staff, 1 member of the Steering Council and 2 partners).
- Information collected: Interview questions focused on the lessons learned during the development and implementation of the ELITE Program. (See interview guide available in Appendix F). This information contributed to the understanding of FSC's thematic priority of mobilizing knowledge about what works to improve labour market outcomes for Black youth and address anti-Black racism in workplaces and skills and training organizations.
- **Sampling**: The ELITE Program identified ten points of contact within the program (such as program coordinators or managers that address participant issues) and partner organizations who were invited to participate in an interview (7 staff and 3 partners).

How the lines of evidence were designed to answer the various key evaluation questions is summarized in the evaluation matrix (available in Appendix C).

^{**}Sum of percentages exceeds 100% due to some respondents participating in more than one year.

^{***}Proportion of total respondents from total participants (see Figure 1).



2.3 Evaluating Equity, Diversity, Inclusion and Reconciliation

The ELITE Program aims to support socio-economic upward mobility of Black Canadian youth, and thus, equity, diversity, inclusion and reconciliation (EDI&R) is interwoven into project objectives. While acknowledging this foundational perspective, the evaluation therefore examined the degree to which other EDI&R factors were being reflected in the work and impacts of the program, such as gender, place of birth, and disability. Because the ELITE Program targets Black youth, the evaluation did not focus on reconciliation and other Indigenous concerns.

2.4 Research Ethics

An ethical approval was obtained from the University of Alberta's Research Ethics Board prior to commencing the evaluation research. All materials were translated into French. French-speaking youth were given the option to participate in either English or French, though none took up the French option. The qualitative measures employed in the evaluation allowed participants to explain their experiences and perspectives in their own words. Participants in both surveys and interviews participated anonymously.

In establishing informed consent, the evaluation made sure to implement leading practices in conducting ethical research, by:

- Explaining to study participants that their participation is voluntary, and they could skip any
 questions they felt uncomfortable answering,
- Explaining to study participants how their data will be collected and how their privacy will be protected,
- Providing access to Malatest's privacy policy which informs participants of their right to have their data removed if they choose to withdraw from the study.

2.5 Limitations

A few limitations were experienced during this evaluation. Malatest took what actions were available to mitigate these limitations and remains confident in the strength of the evaluation. However, the following should be kept in mind when interpreting the evaluation findings.

- **Timelines.** The evaluation faced limitations due to time constraints, given its rapid evaluation nature. However, by offering a small incentive of a \$25 gift card for participation, sufficient individuals volunteered to participate in surveys and interviews in a short period of time.
- **Stakeholder engagement.** Despite best efforts, not all stakeholders invited to provide feedback did so. The participant survey was open for nine weeks. As detailed in the lines of evidence, 150 participants were invited and 46 participated (31% participation rate). Of those 46 participants,



16 were interviewed (35% interview rate). Ten staff and partners were invited to be interviewed: six participated (60% participation rate). The sample of staff and partners provided by the ELITE Program did not include internship hosts, thus their input is not included in this evaluation.

- Participant stage of life: As a youth-oriented program, many participants are focused on their education. As such, some participants are not currently pursuing STEM jobs, limiting the data gathered on the labour market outcomes for Black youth. This evaluation can only report on participants' perception of their job-readiness for the future.
- Recency: Individuals who responded to the survey and those who were interviewed participated
 in the ELITE Program in a range of dates from 2021-2024. Those who participated in the earlier
 years may have a reduced recollection of their experience than those for whom the experience
 was more recent.
- Selection bias. Program staff and participants that are already engaged and invested in the ELITE
 Program's activities are likely to hold positive views about the program. Additionally, students
 choosing to participate in the ELITE Program may have already been committed to a STEM
 career, thus limiting the degree to which the program introduced STEM career options to Black
 youth.
- **Evaluators' ethnicity:** Interviewer and evaluators on this project were not people of colour. This could have limited the comfort of interviewees in discussing issues around anti-Black racism and microaggressions. However, the interviewer was trained in EDI&R methods and experienced in their sensitivities.



3. Findings and Analysis

The ELITE Program for Black Youth is building participants' job readiness through improved STEM knowledge, skills and experience. An internal feedback system keeps the program relevant and the Black leadership provides essential support for Black youth. The wrap-around activities facilitate effective business and wellness experiences. The impacts of the ELITE Program could be enhanced by considering the experiences of new Canadians, the low participation of people with disabilities and collecting more robust outcome data.

3.1 Findings around Program Development

Interviews with ELITE Program staff and partners considered the implementation of the program. The fruit of these discussions can be seen in the lessons learned (below) and the suggestions found in Section 4.1. Additionally, the ELITE Program team has been proactive in conducting annual learning exercises. As a way of gauging effectiveness, they have collected pre- and post-program data from participants for the Entrepreneurship Design Series, the Wellness and Coaching Series and the program in general. Based on the results of these exercises, which included both quantitative surveys and semi-structured qualitative interviews, the ELITE Program team adjusted the program, including making the offer more inclusive. To this end they:

- Added proactive recruitment in Francophone high schools to increase the linguistic diversity of the participants.
- Added an additional Black facilitator to the Entrepreneurship Design Series to provide more Black role models.
- Added a Black male facilitator to the Wellness and Coaching Series to provide a male voice to Black mental health and wellness.

The project also streamlined the Entrepreneurship Design Series workshops and incorporated financial literacy training to emphasize applying new skills in practical situations.

In addition to these findings, interviews with ELITE Program staff and partners unveiled a number of lessons learned in the implementation of the ELITE Program that could be beneficial for other job-readiness projects.

3.1.1 Internal Feedback Loops Add Program Flexibility

Adapting the program each year based on internal feedback loops enhances the Program to effectively serve student needs.

The first lesson learned was the importance of flexibility in serving students and meeting their needs. For the ELITE Program this meant making adjustments to the program each year it was offered based on



internal learning exercises. This built-in feedback function worked well when starting small with a defined target group and mandate; with success, one could then scale up, as the ELITE Program did with the addition of the Carleton University program (not under evaluation here).

3.1.2 Being Black-led Enhances Outcomes

Developing the program as a Black-led initiative ensures appropriate and informed youth training.

An additional lesson staff emphasized is that the success of the ELITE Program for Black Youth was tied to the development of the program within, by and for the Black community. As such, they stated that success was driven by a project led by Black professionals within STEM, who hired other professionals of colour to run the program. This means that those who are running the program are personally aware of the issues facing Black youth and can themselves act as role models, advocates, and mentors. The Wellness and Coaching Series that provided a culturally adapted perspective on wellness was mentioned as particularly important as racism and microaggressions were cited as having a large impact on Black youth's mental health and these youth had few other mental health resources.

"Within the Black community, mental health is still kind of taboo. It is not something that people want to talk about or want to show. Having us come and teach them about that, that asking for help is not bad, helped them to frame it in a different way." (ELITE Program staff member)

3.2 Summary of Program Impacts and Outcomes

A summary assessment of whether the ELITE Program has obtained its objectives is presented in



Figure 5 below.³ More details on short-term impacts and outcomes are discussed in the subsequent subsections.

³ Long-term outcomes are out of scope for this evaluation.



Figure 5: Summary of Outcomes

Intended			
Outcomes for	Actual Outcomes for Participants	Assessment	
Participants			
1. Improved STEM-	Almost all participants surveyed and interviewed	Achieved	
related knowledge and	agreed that the ELITE Program improved their		
skills through work-	leadership, teamwork, communication and		
integrated learning	technical skills, as well as their career and self-		
	development and professionalism.		
2. Improved professional	Most participants surveyed and interviewed agreed	Achieved	
networks	that the ELITE Program helped to grow their		
	professional networks.		
3. Increased job	Almost all participants surveyed, and most	Achieved	
readiness	participants interviewed agreed that the ELITE		
	Program internship experience made them more		
	job ready.		
4. Improved	Most participants surveyed and interviewed agreed	Achieved	
entrepreneurial and	that the Entrepreneurship Design Series enhanced		
leadership skills	their business skills and knowledge. A few have		
	already started a business venture after		
	participation in the ELITE Program.		
5. Increased mental	Participants largely agreed that the Wellness and	Achieved	
health and wellness	Coaching Series helped them develop mental health		
literacy	supporting skills and coping strategies as well as		
	giving them improved knowledge of how to access		
	mental health supports.		
6. Improved ability to	Some participants surveyed and interviewed agreed	Partially Achieved	
manage	that the Wellness and Coaching Series improved		
microaggressions	their ability to manage microaggressions and anti-		
	Black racism.		
7. Increased knowledge	Most survey participants agreed that the Wellness	Achieved	
of how to advocate for	and Coaching Series improved their knowledge of		
self and others	how to advocate for themselves and others.		



3.3 Impacts from Program Activities

Overall, participants appreciated the skills and knowledge gained through the program. The internship was most often cited as the most beneficial part of the program, though both the Entrepreneurship Design Series and the Wellness and Coaching Series were valued by participants to be beneficial to their job readiness as well. Slightly fewer participants indicated appreciation for the Wellness and Coaching Series than the Entrepreneurship Design series. Almost all participants were still interested in STEM careers. Interestingly, few saw racial or gender discriminating as one of the most relevant challenges to their career pursuits. Lack of career guidance was more concerning for these participants.

3.3.1 Internship

Most ELITE Program participants found the internship to be the most helpful aspect of the ELITE Program.

Both interview and survey participants answered that the internship was a catalyst to STEM careers. For interview participants, the internship taught the STEM research and lab skills that helped them advance. Some cherished the encouragement they received from their supervisors in developing their skills. Only one interview participant did not find the internship useful for their career goals as they did not have access to the lab due to their age as a minor.

The survey data supported the importance of the internship on technical skills. Fully 89% of respondents answered that the internship was helpful in developing their technical knowledge and skills (80%). Interestingly, even more respondents answered that the internship was helpful in improving their soft skills (93%) (as seen in Figure 6).

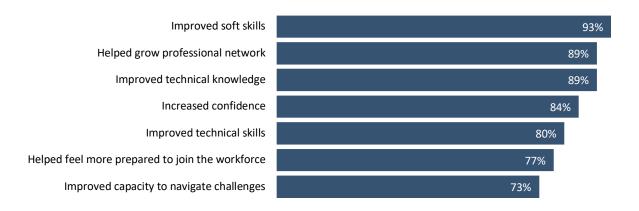


Figure 6: In what ways was the internship experience helpful?

n=46
Percentages sum to >100% since respondents allowed multiple answers



Beyond skills development, some appreciated the benefits of adding an internship experience to their résumé. Survey data supported the finding that the benefits of the internship went beyond skills development, including 89% that answered that the internship helped grow their professional network, 84% that answered it increased their confidence, and 73% that answered it improved their capacity to navigate challenges.

As a result, 77% answered that the internship helped them feel more prepared to join the workforce. When asked directly, most survey respondents (96%) agreed that the internship experience made them more job ready (as seen in Figure 7 below).

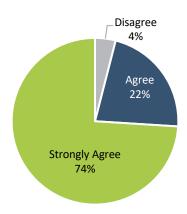


Figure 7: The internship experience made me more job-ready

n = 46

"The ELITE Program was really useful in just kickstarting my internship career, which hopefully will further lead me into a stronger professional career going on" (Associate, postsecondary intern).

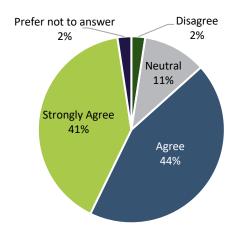
3.3.2 Entrepreneurship Design Series

Most ELITE Program participants saw the Entrepreneurship Design Series as enhancing their business skills and knowledge

Learning to work in a diverse group and learning business skills such as financial management of a venture, doing a pitch, market research, and managing were indicated by interviewed participants as significant benefits of the Entrepreneurship Design Series. Only a few participants found the Entrepreneurship Design Series unhelpful as they were not interested in business.



Figure 8: The Entrepreneurship Design Series enhanced my business skills or knowledge



n=46

"The Entrepreneurship Design Series, before then I would consider myself not an entrepreneur. I did not want anything to do with this. But when I did the series, it definitely improved and opened that innovative part of me." (Associate, postsecondary intern).

The Entrepreneurship Design Series was a success, as it enhanced the business skills for 85% of survey participants (as is displayed in Figure 8 above). Through the Entrepreneurial Design series, the skills survey participants most commonly gained were teamwork and collaboration skills, communication skills and leadership skills (all were selected by 82% of respondents) (as shown in Figure 9 below). Although fewer selected it, one in four (26%) were inspired to start an entrepreneurial venture.





Figure 9: Entrepreneurial Design Series benefits

n=46
Percentages sum to >100% since respondents allowed multiple answers

Most participants cited networking as the most helpful skill gained through the Entrepreneurship Design Series, some stated that it would have a lasting effect on their careers.

Interview participants indicated that networking with peers and STEM leaders had become less daunting, with some having built a sense of community within their networks. Many also talked about collaboration; the ELITE Program prepared them for STEM careers by teaching them how to contribute to a team and how to become more comfortable working with others. In particular, participants commonly mentioned the deepened skills and increased confidence in written and oral communication. Some specifically mentioned public speaking as an important skill developed. A few talked of developing interpersonal skills such as conflict resolution.

Of the survey respondents, 91% agreed that the ELITE Program helped them to create and maintain contact with people in their area who can help them professionally. Further, 88% indicated that the internship, specifically, helped them grow their professional networks.

"The networking that ELITE gave was one of the best things from it, because I got to meet people in different fields to learn from them and get mentored by them" (Assistant, high school intern).



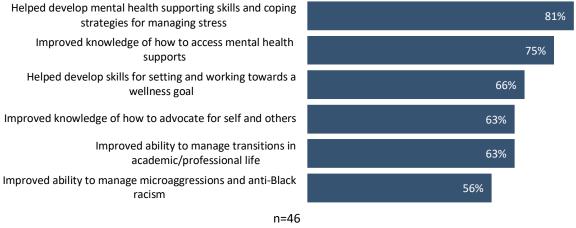
3.3.3 Wellness and Coaching Series

Most ELITE Program participants found that the Wellness and Coaching Series supported their growth as an individual.

Most interview participants benefited from the Wellness and Coaching Series' stress-reduction techniques and self-care. However, some indicated that the program was not particularly useful as they already had coping skills, or they found the virtual format challenging.

Based on survey data (see Figure 10), the Wellness and Coaching Series was helpful in a number of ways. Most commonly, the Wellness and Coaching Series helped develop mental health supporting skills and coping strategies for managing stress (81%). Additionally, more than half (56%) improved their ability to manage microaggressions and anti-black racism.

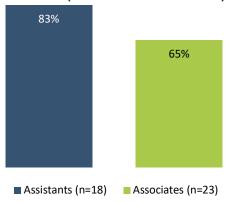
Figure 10: Ways the Wellness and Coaching series were helpful



Percentages sum to >100% since respondents allowed multiple answers



Figure 11: The Wellness and Coaching series supported me to grow as an individual (assistants vs. associates)



The benefits of the Wellness and Coaching Series may be more profound among assistants than associates. Two thirds of associates (65%) indicated that the Wellness and Coaching Series supported their growth as an individual, slightly less than for the assistants (83%) (see Figure 11). Given that associates are generally older than assistants, it is possible that, like some of the interview participants, survey respondents who were associates had already learned some of these mental health skills.

3.4 Outcomes

Almost all the participants surveyed and interviewed were still students, mostly undergraduates in university. Thus, this evaluation cannot report on their transition into the job market. Their discussions of job-readiness were based on their thoughts about their future, not their current status. Both interviews and survey results collect participants' perceptions of their knowledge and skill, rather than demonstrated knowledge and skill. At least from this perspective, all the intended short-term outcomes for participants were actualized or partially actualized. Long-term outcomes will need more time to determine success.

3.4.1 Interest in STEM

Almost all ELITE Program participants interviewed and surveyed remain interested in STEM careers.

Almost all survey respondents who had started a college or university program indicated they were in a STEM-related area of study (95%). Some interview participants mentioned they changed their career choice to STEM, or within STEM, based on their ELITE Program experience.

Since participating in the ELITE Program, both assistant and associate survey respondents have taken various educational and employment steps in pursuit of a career in STEM (see Figure 12 below). Assistants were most likely to have started university or college (72%). Associates were most likely to have applied to further STEM internships (54%). An equal percentage of assistants and associates were granted scholarships or fellowships (50%). Overall associates have been more active than assistants within the STEM space; although this is perhaps not surprising given that assistants are either just getting into university or still in high school.



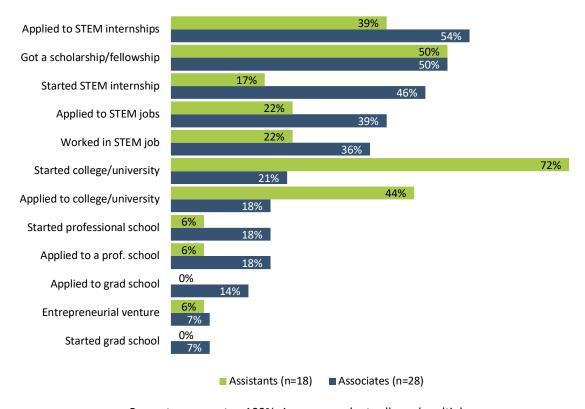


Figure 12: Since completing the ELITE Program, Assistants vs. Associates

Percentages sum to >100% since respondents allowed multiple answers

"It has given me an edge and being able to hit the ground running early and being able to acquire a multitude of skill sets and different tools that I can use to kind of tackle the challenges I face today a bit quicker" (Associate, postsecondary intern).

3.4.2 Remaining Challenges

The most relevant challenges survey participants identified were lack of career guidance (54%) and lack of other internship opportunities (50%) (as seen in Figure 13 below).



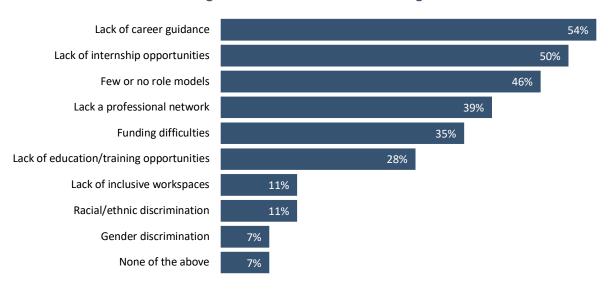


Figure 13: The most relevant challenges

n=46
Percentages sum to >100% since respondents allowed multiple answers

Some participants also spoke to the challenge of finding a job in a difficult market. Although 39% still found their lack of a professional network a challenge, those interviewed indicated that the ELITE Program helped address this challenge by teaching them networking skills and providing an internship that built up their STEM skills and looked good on a resumé.

Few survey respondents indicated that a lack of inclusive workspaces, racial or ethnic discrimination or gender discrimination were the most relevant challenges to their career.

Some interview participants indicated that social isolation as the only Black person, or more specifically the only Black woman, in the room would be a challenge. The ELITE Program helped address this challenge by creating a Black network, helping build confidence that their voice matters and providing skills to manage microaggressions.

One interesting finding is that few of the survey participants saw racial discrimination (11%) or gender discrimination (7%) as one of the challenges most relevant to their pursuit of a STEM career (see Figure 13 above). In addition, few interview participants expected racism or sexism as a potential challenge to their STEM career as well.⁴ In trying to explain this, it is plausible that the experience of the ELITE Program, with Black men and women trainers, professionals, mentors, and professors, has normalized

⁴ It must be noted, however, that the interviewer was not a person of colour and this could impact the comfort level for the participants in discussing racism. However, this situation would not have affected the survey respondents.



STEM careers as possible pathways for Black youth of any gender, thereby reducing the perception that racial and gender discrimination will be a barrier.

It is important to note that some interview participants specifically mentioned the significance of the ELITE Program staff and supervisors in encouraging them, wanting to see them grow, and providing an important network for them, all of which helps them address the challenges of current and future STEM work.

"The fact that Doctor Andre and the other creators of the ELITE Program are so dedicated in supporting Black youth in achieving their dreams or just supporting them in this vital step really spoke volumes for me and it has inspired me to want to do something as well in the future. If I have the opportunity to support people in their dreams, especially when they come from marginalized backgrounds, I want to be in a position to support them the same way the ELITE Program provided me with so many skills, so many different connections" (Associate, postsecondary intern).

3.5 EDI&R Findings

As the ELITE Program for Black Youth focuses on improving labour market outcomes for Black youth, a group underrepresented in STEM fields, this is a program supporting equity and inclusion. Additionally, a component of the program is focused on addressing anti-Black racism and microaggressions in workplaces and skills and training organizations. Still, the program may want to consider how it supports women and newcomers, given their differing experiences with the program. Also, more could be done to support the engagement of youth with disabilities.

3.5.1 Program Diversity

The ELITE Program is diverse and has increased participation by Francophone youth.

In addition to Black youth, the program recruits from a diverse range of equity-deserving groups. Participants include immigrants and those born in Canada.⁵ The program has near equal male and female participants.⁶ After recognizing some earlier shortcomings, they have proactively engaged the francophone Black youth of Edmonton.⁷ Our survey showed a comparable percentage of LGBTQ+⁸ participants as is found nationally in that age group (see **Error! Reference source not found.** below).

⁵ (ELITE, 2023)

⁶ (ELITE, 2023)and (ELITE, 2022)

⁷ (ELITE, 2024)

⁸ Lesbian, Gay, Bisexual, Transgender, Queer, plus. Multiple versions of this acronym exist to include the wide variety of minority sexualities and genders.



Additionally, the ELITE Program includes diversity within the program leaders. The Steering Council and staff of the ELITE Program, including the part-time facilitators of the Wellness and Coaching Series and the Entrepreneurship Design Series, are diverse by race, gender, sexuality and language.

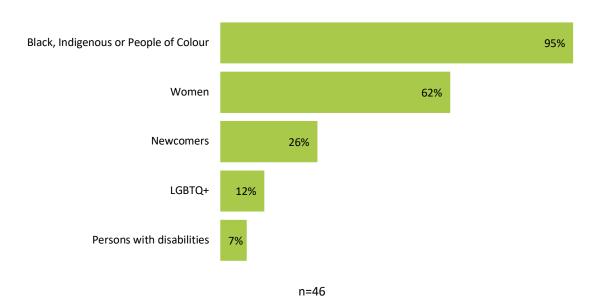


Figure 14: Survey participants from equity-seeking groups

Percentages sum to >100% since respondents allowed multiple answers

Participation by people with disabilities is low compared to the general population

The ELITE Program may want to do more in supporting disabled youth. Only 7% of survey respondents identified as having a disability (see **Error! Reference source not found.**). By comparison in 2022, 20% of young people aged 15-24 in Canada reported having a disability. More specifically, the Canadian University Survey Consortium reported that 35% of graduating students from Canadian universities in 2024 identify as having a disability. 10

Given the modest sample size and response rate, it is difficult to know for sure if this finding is spurious. For instance, the low numbers of disabled participants in the evaluation survey may simply be due to people with disabilities not participating in the survey. Still, the ELITE program may want to investigate further to identify whether people with disabilities face barriers in participating in the ELITE Program.

⁹ (Hebert, 2024)

¹⁰ (Canadian University Survey Consortium, 2024)



3.5.2 Newcomers May Face Continuing Challenges

Even after participating in the ELITE Program, newcomers may have greater challenges to pursuing STEM careers than non-newcomers.¹¹ The survey suggests that newcomers are less likely than others to have applied to further STEM-related internship positions (18% compared to 57%) or employment positions (18% compared to 37%) and less likely to have worked in STEM-related employment (9% compared to 37%) (as seen in Figure 15 below). They are also more likely to see a lack of education or training opportunities as a career challenge (45% compared to 23% of non-newcomers).

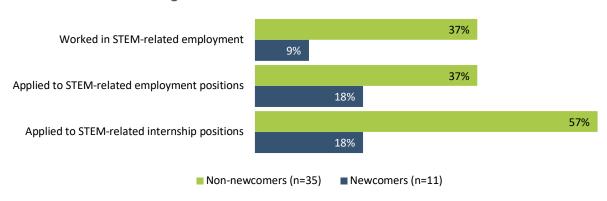


Figure 15: Newcomers vs. Non-newcomers in STEM

Percentages sum to >100% since respondents allowed multiple answers

There are many possible reasons for this. For instance, some newcomers may still be struggling with English or face discrimination due to their accent. For some, their socioeconomic status may be a barrier to remaining in school. However, there is also some evidence that newcomers experienced the ELITE Program differently than non-newcomers.

In particular, only 55% of newcomers perceived the internship as improving their capacity to navigate challenges in pursuing a career, compared to 79% of non-newcomers. It seems newcomers also were not as likely to agree that the Entrepreneurship Design Series provided enhanced business skills and knowledge. Only 64% of newcomers agreed with that statement, whereas 91% of non-newcomers agreed. Whether this was because newcomers already had business skills and knowledge, were less interested in business skills and knowledge, or had difficulty gaining the offered skills and knowledge is unclear. However, newcomers were slightly less likely to be inspired to start an entrepreneurial venture (14%) than non-newcomers (28%). Where newcomers did benefit seems to have been from learning financial strategies (100%, see Figure 16 below).

¹¹ Which could include Canadian citizens (by birth and naturalization) and permanent residents



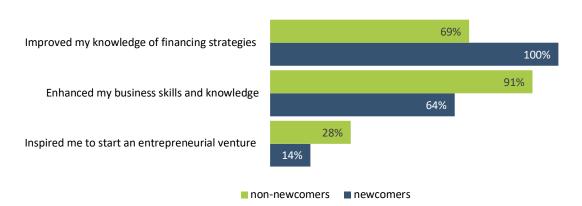


Figure 16: Ways the Entrepreneurship Design Series was helpful, newcomer vs. non-newcomer

Newcomers seem to have benefited less from mental health supports. They were less likely to report improved knowledge of accessing mental health supports (50% compared to 83%), and less likely to agree that the Wellness and Coaching Series improved their knowledge of advocating for themselves and others (25% compared to 75%).¹²

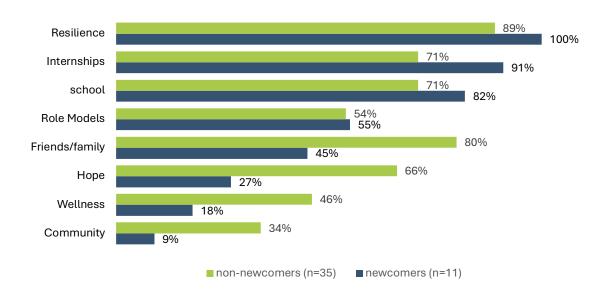
When asked about supports they consider helpful for pursuing their career goals, there were some clear differences between newcomers and those born in Canada. Newcomers were less likely than non-newcomers to have selected hope (27% compared to 66%), family and friends (45% compared to 80%), community (9% compared to 34%) or wellness knowledge and skills (18% compared to 46%) as supports (as can be seen in Figure 17 below). It is unclear if these supports were less likely to be available or less important to newcomers. Newcomers were, however, more likely to have selected resilience (100%), internships (91%), and school (82%) as helpful supports.

29

¹²There was, however, a higher proportion of newcomers (75%) than non-newcomers (50%) who indicated that they had improved ability to manage microaggressions and anti-Black racism.



Figure 17: Skills, knowledge, strengths and resources, which have been helpful to pursue career goals, newcomers and non-newcomers



Percentages sum to >100% since respondents allowed multiple answers

These results lead to a conclusion that the challenges facing newcomers are great and the ELITE Program could do more to mitigate these challenges. Of course, as we have no baseline information we cannot say if these percentages are, in fact, an improvement from prior to participating in the ELITE program. However, attention should be paid to this issue to improve the outcomes for newcomers. It is of particular concern that only 18% of newcomers have applied to further STEM-related internships when 91% of them indicated internships were helpful to support their career goals.

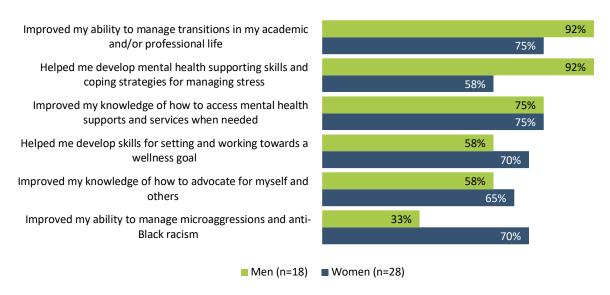
3.5.3 Women may have benefited Less from the Program

A lower proportion of women (58%) than men (92%) agreed that the Wellness and Coaching Series helped them develop mental health supporting skills and coping strategies for managing stress (see Figure 18 below). ¹³ However, a higher proportion of women (70%) than men (33%) indicated that they improved their ability to manage microaggressions and anti-black racism. It is difficult to discern if these differences are due to interest or previous experience.

¹³ Since survey respondents were only asked if they were women, as an equity-deserving group, we can only infer the remaining respondents were something other than women. For the sake of simplicity, we name these as men, though the group could include non-binary or other identities.



Figure 18: Ways the Wellness and Coaching Series was helpful, Women vs. Men



Percentages sum to >100% since respondents allowed multiple answers

It is apparent that there is also a gender distinction around education. Women seem to be:

- more likely to have applied to or started a program at a professional school (both choices at 21% for women compared to 0% for men), and
- less likely to have begun another STEM-related internship (25% compared to 50%).

Women are also more likely to see a lack of education or training opportunities (39% compared to 11% of men) as one of the most relevant career challenges. Other challenges for women are a lack of career guidance and a lack of professional networks (see Figure 19 below).



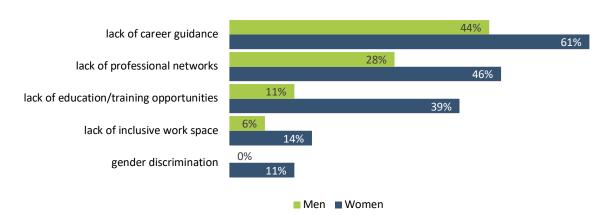


Figure 19: Most Relevant Challenges, Women vs. Men

These differences seem consistent with the current challenges for women in STEM. While these challenges remain, it is possible that these numbers for the women of the ELITE Program are actually an improvement from the Canadian experience. ¹⁴ As with newcomers, we do not have baseline data for Black women's experiences in STEM and cannot speak to how much these women's experiences indicate a change. A few interview participants did indicate that STEM had a reputation as being "an old boys' club."

¹⁴ In 2023 women made up only 25% of people employed in STEM in Canada (Global University Systems Canada, 2023)



4. Suggestions, Recommendations and Implications

The ELITE Program for Black Youth addresses the FSC thematic priorities of improving labour market outcomes for Black youth, addressing anti-Black racism in workplaces and skills and training organizations, and knowledge mobilization of the successes in addressing these. More specifically, the ELITE Program is doing well in achieving its main objectives of opening doors for Black youth to STEM careers. But some changes could help enhance the benefits to participants. Based on the evaluation, a series of suggestions and recommendations emerged as ways to potentially improve an already strong program. The evaluation concludes with implications for the funding of this and other similar projects.

4.1 Stakeholder Suggestions

All participants, staff and partners interviewed agreed that the ELITE Program was well designed and beneficial for making Black youth job-ready, as well as supportive of other life and socio-emotional skills. Even so, most offered suggestions for improvement.

- The most common suggestion was to provide exposure to a greater variety of STEM careers and industry leaders, perhaps through industry lab tours, networking with the supervisors of other ELITE Program participants, or hearing from ELITE Program alumni (through presentations or a database) about their current projects and research.
- The second most frequently mentioned suggestion by participants was to keep the whole program in-person. Some participants learned virtually during the COVID-19 pandemic, which they recounted as being not ideal. Others particularly mentioned that the Wellness and Coaching Series needed to be in-person as it was difficult for them to make meaningful connections with others online. Based on staff interviews, this is a situation that the Wellness and Coaching Series team seems to be aware of.
- A few participants suggested a series of university skills, particularly for the assistants, and a series of job search skills such as résumé writing, interviewing, and using LinkedIn.
- Other participant suggestions were
 - o to include more cohort social events,
 - to explain more fulsomely the purpose of the Entrepreneurship Design Series,
 - o to provide participants more lab time,
 - to let high school students access the labs (or keep them out of internships that have an age restriction),
 - to add more industry-based internships,
 - o to allow interns to evaluate their internships,
 - o to support participants though a mentorship system,
 - to offer learning sessions about entrepreneurship, job search skills, and wellness during the school year.



- Additional staff and partner suggestions included:
 - to host a larger public end event to showcase the work the students were doing,
 - o to offer internships that can continue into the school year,
 - o to develop a mentorship program drawing on the alumni of the program,
 - o to develop a junior high program that could start influencing Black youth earlier.

4.2 Recommendations

With the thematic priorities and the evaluation findings in mind, the following are recommended:

Recommendation 1: Newcomers seem to have a significantly lower rate of staying within STEM jobs. The ELITE Program leadership should consider whether there are any additional barriers to staying within STEM that are facing newcomer youth, which could be mitigated through the ELITE Program for Black Youth. Some possible issues to explore are

- the socioeconomic status of newcomers, and
- the access to information about internship and job applications.

Recommendation 2: Few ELITE Program participants self-identified as being disabled in the survey. The ELITE Program for Black youth should consider whether there are any barriers to the program for people with physical, mental, and learning disabilities. Should it be determined that barriers exist, the ELITE Program should look to close those gaps and look for increased levels of participation among disabled youth to improve labour market outcomes for all Black youth. Possible activities would be:

- a training program for staff and partners on the needs of people with disabilities within STEM education and employment, if barriers found, and
- a speaker series with Black professionals with disabilities to discuss challenges and opportunities.

Recommendation 3: This evaluation did not address how participants are chosen. It is possible that participants were already committed to careers in STEM. Thus, this evaluation cannot indicate to what extent the program is *increasing* the number of Black youth going into STEM fields in university. It would be useful for the ELITE Program team to gather data about when participants first became interested in a STEM career (whether it was through the ELITE Program or prior). Socio-economic status and family history of university education would also be relevant data to determine if the program is reaching Black youth facing multiple barriers.

Recommendation 4: It would also be beneficial to track participants' career journeys in a longitudinal study as part of the program's ongoing activities. This would allow greater understanding of the long-term outcomes of the program, such as labour market outcomes in the transition from STEM education to STEM employment, the development of entrepreneurial ventures, and the continued benefits of



wellness and mental health knowledge and skills, including addressing anti-Black racism and microaggressions in workplaces. A longitudinal study could be a valuable resource for the continued securing of funding and for other organizations wanting to develop similar programs. The data from recommendations 3 and 4 could potentially add significant impact to any knowledge mobilization ELITE engages in to further highlight the thematic priorities for Black youth.

Recommendation 5: Including feedback from internship hosts in both internal and external evaluations would add an important layer of understanding how the ELITE Program is improving labour market outcomes for Black youth and addressing anti-Black racism in workplaces and skills and training organizations.

4.3 Implications for FSC, for Other Funding Organizations and for Organizations like the ELITE Program for Black Youth

As these findings are considered, there are a number of learnings that can be applied within organizations trying to achieve similar aims.

The multipronged approach to job-readiness is a high potential model of skill development.

Incorporating paid internships, entrepreneurial training, and wellness education and coaching seems to have produced a program that works well to meet the holistic needs of youth. More time is needed to understand the long-term outcomes, but the participants surveyed and interviewed for this evaluation point to a developing cohort of well-prepared individuals for successful high-wage STEM employment. Further skills development programs utilizing such a multipronged model, especially for other marginalized groups, would be useful investments.

A program design that incorporates regular internal evaluation can strengthen outcomes. This internal evaluation must be incorporated into a process of refining and revising program content and implementation, for full effectiveness. Funding organizations would do well to encourage proactive internal evaluation with periodic external evaluation. While the ELITE Program did excel at this, some guidance in how to best conduct an internal evaluation and use it to greatest effect could be beneficial for future projects.

Programs with a target group are strongest when delivered by members of that target group. In the case of the ELITE program, having Black leaders run a program for Black youth allowed for the program to address the real issues Black youth face in pursuit of STEM careers such as anti-Black racism and microaggressions, and provided role-models for these youth to look to. Other programs that target a specific group (whether ethnicity, sexuality or gender, among others) should have foundational input and participation by members of that specific demographic group.



Appendix A: Works Cited

Canadian University Survey Consortium. (2024). 2024 Graduating Student Survey Master Report.

Danby, C. (2024, Feb 6). Waterloo Engineering Outreach's community program STEMpowered tackles the lack of Black representation in STEM. Retrieved from Education News Canada: https://educationnewscanada.com/article/education/level/university/1/1064071/-waterlooengineering-outreach-s-community-program-stempowered-tackles-the-lack-of-black-representation-in-stem.html

ELITE. (2022). ELITE Pre-Entrepreneurship Design Report 2022.

ELITE. (2023). ELITE Entrepreneurship Survey Data 2023.

ELITE. (2024). An Overview of the ELITE Program for Black Youth.

Gawalko, M. Y.-P. (2022). 2022 Evaluation Report for the Elite Program for Black Youth Wellness and Coaching Series.

Global University Systems Canada. (2023). *Breaking Barriers: Women n STEM*. https://guscanada.com/breaking-barriers-women-in-stem/

Hancock, B. M. (2021, April). *The Black experience at work in charts*. Retrieved from McKinsey Quarterly: https://drive.google.com/file/d/19Pu08bmAySBLSfduderGXYHbwJ7vmZJ-/view

Hebert, B.-P. e. (2024). A demographic, employment and income profile of persons with disabilities aged 15 years and over in Canada, 2022. Retrieved from Statistics Canada: www150.statcan.gc.ca/n1/pub/89-654-x/89-654-x2024001-eng.htm

Mohamed, S. a. (2021). ELITE Program for Black Youth Wellness and Coaching Series Evaluation Report.

Sacak, K. Y.-P. (2023). 2023 Evaluation Report for the Elite Program for Black Youth Wellness and Coaching Series.

The State of Black Canadians in STEM. (2022, May 13). Retrieved from Obsidi: https://obsidi.com/the-state-of-black-canadians-in-stem/

Wong, J. (2022, Feb 20). *Black scientists, community leaders want Black youth 'to see possibility' in STEM*. Retrieved from CBC: /www.cbc.ca/news/canada/black-students-stem-1.6344939



Appendix B: Logic Model

Problem: Black Canadians are underrepresented among innovators and professionals in high-wage emerging technology areas of work, and this creates a systemic barrier to their socio-economic upward mobility. The ELITE Program aims to support Black youth to generate hands-on skills, knowledge, and resilience, which will translate to pathways for STEM related work careers in high wage professions.

Inputs	Activities	Outputs	Outcomes	Impacts
Funding: \$3,098,530 Sponsored by Foundations, Consortia, Government, UofA, Scholarships/Fellowships, Industry Training Partnerships • UofA – Faculties of Engineering, Science, Medicine and Dentistry, Augustana Campus, and Campus Saint-Jean • InnoTech Alberta • Alberta Health Services • 30+ for-profit internship hosts Program Design Partnerships • UofA – Faculty of Education (Wellness & coaching series) • RBCx (Entrepreneurship training design) • Black Business Ventures Association • Edmonton Unlimited Program Staff Who works to run the program? Numbers? • 12 student workers (Wellness) coaches, PhD student mentors, Communications coordinators,	Paid Internships 8-16 weeks of primarily full- time internship work Work-integrated learning in various STEM fields Entrepreneurship & Leadership Training (E<) Teamwork activities Pitch presentations Entrepreneurship training Enterprise (start-up business)	Paid Internships 132 interns between ages 15- 22 Paid work for 62 students (50 interns and 12 program staff) (2022 only) 3520 hours of work from volunteers (2022 only) 52 high school students 80 undergraduate students E< 64 hours of E&L training over 8 weeks (2023 only) 135 students W&CS 45 sessions of wellness and coaching (140 hours) across three cohorts (31 sessions for undergraduate and 14 for high school) 114 students completed W&CS (66 Undergraduate, 48 High school) across three cohorts Created 8 modules of wellness and coaching series 3 W&CS program reports 3 W&CS evaluation reports One on one coaching sersions	Internships Improved STEM-related knowledge/skills through work-integrated learning or experiential learning Improved professional networks Feel more prepared to join workforce Increased job readiness E<? (RBC impact report 2022): Improved Critical thinking Complex problem solving Social perceptiveness Financial literacy Information communication technology/digital literacy Teamwork and collaboration Communication Creativity and innovation Adaptability W&CS Increased mental health and wellness literacy Develop mental health-supporting skills and coping strategies Improve ability to manage transitions in academic and professional life	Educational Learned knowledge and skills will contribute to job-readiness for Black youth Black youth will be more equipped to navigate challenges in STEM career/entrepreneurship pursuits Recognizing the need for higher education in entrepreneurship in the technology space, More Black youth will seek education in undergraduate and graduate/professional schools Economic More Black Canadian youth will acquire job opportunities in STEM fields or pursue start-up business ideas Social Black youth will be more prepared to access high wage professions or embark on entrepreneurial endeavours Reduction on youth unemployment in Alberta Psychological Increased resilience in academic and professional life Black Youth utilize mental health and wellness skills in various workplace contexts

Data Collection



Appendix C: Evaluation Matrix

Key Learning Questions (including FSC Strategic Questions)	Sub-questions	Key Metrics (disaggregated where possible)	Methods & Sources (including target pop. where relevant)
What works, for whom and in the (FSC thematic priority question	•	e labour market outcomes	for Black youth?
What skills, knowledge, resources, and strengths obtained during the ELITE Program were helpful for managing the challenges encountered during the	To what degree did the skills, knowledge, and resources provided help participants manage challenges in transitioning to work life?	Extent to which participants found the Entrepreneurship and Leadership Training prepared them for work in STEM	 Participant surveys Semi structured interviews with participants
transition to work life?	How resilient are the cohorts of the program?	Brief Resilience Scale (matrix of for measuring resilience)?	Participant surveys
What additional skills, knowledge, resources, and strengths can make transition to work life easier?	What supports beyond those provided by the program have helped the most with transitioning to work?	Perceptions of participants about what outside supports were most helpful in transitioning to work	 Participant surveys Semi structured interviews with participants
	What additional supports that have not been available would be helpful in	Perceptions of participants about what additional supports might be helpful	Participant surveysSemi structured



Key Learning Questions (including FSC Strategic Questions)	Sub-questions	Key Metrics (disaggregated where possible)	Data Collection Methods & Sources (including target pop. where relevant)
	transitioning to work?		interviews with participants
How does the experience	What have the career outcomes of previous cohorts been? (Are they employed, in what field)	Career trajectory (additional training pursued), employment status since completing the program	 Participant surveys Semi structured interviews with participants
obtained through the ELITE Program affect Black youths' career pursuit over the years after the Program?	Which training and supports have participants found the most useful in obtaining and retaining	Relative influence of different supports (wellness and coaching, entrepreneurship and leadership training, paid internship) over time	 Participant surveys Semi structured interviews with participants
	employment?	Comparison with nonparticipants (was not possible in the end)	Nonparticipant survey
How have the targeted wraparound activities offered by the ELITE Program supported youths' transition to work life?	To what extent have the supports offered by the program helped participants transition to work life?	Perceived usefulness of the Wellness and Coaching Series in supporting their transition to work	 Participant surveys Semi structured interviews with participants



Key Learning Questions (including FSC Strategic Questions)	Sub-questions	Key Metrics (disaggregated where possible)	Data Collection Methods & Sources (including target pop. where relevant)
What works, for whom and in and training organizations? (FS		· · · · · · · · · · · · · · · · · · ·	places and skills
What are some of the	How useful was the paid internship opportunity in	Perceived usefulness of the paid internship in transitioning to work	 Participant surveys Semi structured interviews with participants
challenges for Black youth seeking STEM careers during their transition to work life? (i.e., employment search, early years of work	transitioning to work?	Perceived usefulness of the paid internship in transitioning to work	 Participant surveys Semi structured interviews with participants
experience)	What challenges remain for Black youth pursuing STEM careers?	Perceptions of participants	 Participant surveys Semi structured interviews with participants
What is unique about the design and execution of the ELITE Program that makes it effective in supporting Black youth in overcoming these challenges?	What innovations in content delivery and design are incorporated into the ELITE Program that help support Black youth?	Perceptions of ELITE staff and content delivery partners	•Interviews with staff and content delivery partners

How do we mobilize knowledge about what works to improve labour market outcomes for Black youth and to address anti-Black racism in workplaces and skills and training organizations? (FSC thematic priority question for Black Youth, Q3)



Key Learning Questions (including FSC Strategic Questions)	Sub-questions	Key Metrics (disaggregated where possible)	Data Collection Methods & Sources (including target pop. where relevant)
What recommendations for improving support programs for Black youth emerge from evaluating ELITE's program?	What are the key findings from the evaluation?	Analysis of indicators listed above	Synthesis of above methods
What lessons learned from the ELITE Program can be shared to improve similar programs?	What key findings from the evaluation might apply to other similar programs?	Perceptions of ELITE staff and content delivery partners	Interviews with staff and content delivery partners



Appendix D: Job Readiness Questionnaire

1. What cohort(s) of the ELITE Program did you complete?

Please select all that apply. ☐ ELITE Assistants (high school cohort) ☐ ELITE Associates (undergraduate cohort) □ Did not complete the ELITE Program 2. What year did you complete the ELITE Assistants Program (high school cohort)? □ 2021 □ 2022 □ 2023 □ 2024 □ Prefer not to answer 3. What year did you complete the ELITE Associates Program (undergraduate cohort)? □ 2021 □ 2022 □ 2023 □ 2024 □ Prefer not to answer 4. What is your employment status? ☐ Currently not working and not seeking employment ☐ Seeking employment in STEM fields ☐ Seeking employment outside of STEM fields ☐ Working in a STEM-related job position ☐ Working in a job position outside of STEM fields ☐ Working as a graduate teaching/research assistant □ Prefer not to answer 5. Since completing the ELITE Program, have you: Please select all that apply. ☐ Applied to STEM-related internship positions ☐ Applied to STEM-related employment positions ☐ Applied to a college or university undergraduate program ☐ Applied to graduate school (such as a master's or PhD) ☐ Applied to a professional school □ None of the above □ Prefer not to answer



6.	Sin	ce completing the ELITE Program, have you:
Ple	ase.	select all that apply.
		Began a STEM-related internship Worked in STEM-related employment Started a college or university undergraduate program Started graduate school (such as a master's or PhD) Got a scholarship or a fellowship Started a program at a professional school Started an entrepreneurial venture None of the above Prefer not to answer
lf c	appli	ed to or started a college or university program
7.	Is y	our area of study STEM-related? Yes No Prefer not to answer
Ch	aller	nges in Pursuing STEM Careers
8.		en you consider your pursuit of STEM careers, which of the following challenges have been most evant to your experience?
Sei	lect d	all that apply
		Lack of education/training opportunities Funding difficulties Lack of career guidance Lack of internship opportunities Lack of a professional network Racial or ethnic discrimination Gender discrimination A language barrier Lack of inclusive workspaces Having few or no role models Other. Please describe: None of the above
		Prefer not to answer



Select all that apply

Strengths and Resources in Pursuing STEM Careers

9. When you consider your skills, knowledge, strengths and resources, which have been helpful to pursue your career goals so far?

Норе
Resilience
Social support from my friends and family
Social support from my community
Role models or mentors
School/University education
Learning from internships or work-integrated training
Physical/mental wellness skills and knowledge
Other. Please describe:
None of the above
Prefer not to answer

Skills and knowledge acquisition (program-specific effects on essential and technical skills)

10. Please indicate your level of agreement with the following statements about the ELITE Program.

	Strongly disagre e (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)	Prefer not to answer (99)
a. The internship experience made me more job-ready	0	0	0	0	0	0
b. The Entrepreneurship Design Series enhanced my business skills or knowledge	0	0	0	0	0	0
c. The Wellness and Coaching Series supported me to grow as an individual	0	0	0	0	0	0

11. In what ways was internship experience helpful?



Select all that apply

	Improved my technical knowledge (such as engineering analysis, scientific research, artificial intelligence)
	Improved my technical skills (such as engineering analysis, scientific research, artificial intelligence)
	Improved my "soft" skills (such as public speaking, adaptability, communication)
	Increased my confidence
	Helped me grow my professional network
	Improved my capacity to navigate challenges in pursuing a career
	Helped me feel more prepared to join the workforce
	Other. Please describe:
	None of the above
	Prefer not to answer
Ask Q1	2 if the Entrepreneurship Design Series enhanced their business skills (Q10b=4,5)
12. In	what ways was the Entrepreneurship Design Series helpful?
Select	all that apply
	Improved my knowledge of financing strategies (1)
	Increased my understanding of steps to start-up a business (2)
	Improved my teamwork and collaboration skills (3)
	Improved my communication skills (such as pitching and negotiation, oral presentation, writing skills) (4)
	Improved my leadership skills (such as engaging with people, training others, creating a vision and plan, leading projects and tasks, listening to others carefully) (5)
	Helped me develop my entrepreneurial skills (6)
	Inspired me to start an entrepreneurial venture (7)
	Other. Please describe: (500-character limit) (77)
	None of the above (88)x
	Prefer not to answer (99)x
13. In	what ways was the Wellness and Coaching Series helpful?
	all that apply
SCIECT	
	Helped me develon mental health supporting skills and coping strategies for managing stress



Improved my ability to manage transitions in my academic and/or professional life
Improved my ability to manage microaggressions and anti-Black racism
Improved my knowledge of how to advocate for myself and others
Improved my knowledge of how to access mental health supports and services when needed
Helped me develop skills for setting and working towards a wellness goal
Other. Please describe:
None of the above
Prefer not to answer

Career/Job Readiness Questions:

14. Please indicate whether you agree with the following statements about capacities developed through the ELITE Program.

Leadership skills	Agree (1)	Disagree (2)	Prefer not to answer (99)
The ELITE Program improved my ability to motivate and encourage myself and others toward a shared goal.	0	0	0
After completing the ELITE Program, I feel more confident to serve as a role model when approaching tasks.	0	0	0
The ELITE Program improved my skills on planning, initiating, and managing projects.	0	0	0
The ELITE Program inspired me to make use of innovative thinking and go beyond traditional methods in my work.	0	0	0

Teamwork skills	Agree (1)	Disagree (2)	Prefer not to answer
The ELITE Program improved my ability to collaborate with others in a team to achieve common goals.	0	0	0



The ELITE Program helped me improve the ability to compromise within teamwork.	0	0	0
The ELITE Program helped me improve the ability to manage conflicts and respect diverse personalities in work teams.	0	0	0
After completing the ELITE Program, I feel more comfortable taking team responsibilities.	0	0	0

Technological skills	Agree (1)	Disagree (2)	Prefer not to answer (99)
The ELITE Program inspired me to follow and adapt to new technological developments in my area.	0	0	0
The ELITE Program improved my ability to identifying the appropriate technology to accomplish tasks.	0	0	0
The ELITE Program inspired me to use technology to increase efficiency in my work.	0	0	0

Communication skills	Agree (1)	Disagree (2)	Prefer not to answer (99)
Since completing the ELITE Program, I feel more confident in my communication skills.	0	0	0
The ELITE Program improved my ability to communicate my ideas and thoughts with others clearly.	0	0	0
The ELITE Program improved my ability to ask the right asking questions to my supervisors or colleagues to learn the specific information I need.	0	0	0



The ELITE Program improved my ability to			
address issues when working with colleagues	0	0	0
from different cultural backgrounds.			

Critical Thinking	Agree (1)	Disagree (2)	Prefer not to answer (99)
The ELITE Program helped me improve my skills in gathering and organizing information from diverse sources to solve problems.	0	0	0
The ELITE Program inspired me to be mindful of personal biases when analyzing data from different sources.	0	0	0
The ELITE Program helped me with utilizing multitasking and prioritizing skills in fast-paced environments.	0	0	0

15. Thinking again about the ELITE Program overall, please indicate whether you agree with the following statements about capacities developed through the program.

Equity and Inclusion	Agree (1)	Disagree (2)	Prefer not to answer (99)
The ELITE Program improved my ability to identify and address barriers related to racism, biases, and inequities.	0	0	0
The ELITE Program inspired me to keep an open mind to diverse ideas and new ways of thinking.	0	0	0
The ELITE Program improved my ability to incorporate multiple cultural perspectives to my professional activities.	0	0	0



The ELITE Program inspired me to advocate for			
inclusion, equitable practices, justice, and	0	0	0
empowerment for marginalized communities.			

16. Thinking about the ELITE Program overall, please indicate whether you agree with the following statements about capacities developed through the program.

Career & Self-development	Agree (1)	Disagree (2)	Prefer not to answer (99)
The ELITE Program helped me be mindful of my career-related strengths and areas of development.	0	0	0
The ELITE Program inspired me to seek opportunities for learning or developing career-related skills.	0	0	0
The ELITE program inspired me to develop career plans for my professional goals.	0	0	0
The ELITE Program helped me to create and maintain contact with people in my area who can help me professionally.	0	0	0

Professionalism	Agree (1)	Disagree (2)	Prefer not to answer (99)
The ELITE Program helped me be mindful of being present and prepared for work tasks.	0	0	0
The ELITE Program inspired me to act with integrity toward myself, my colleagues, and organizations.	0	0	0



The ELITE Program helped me feel			
prepared to join the work force in my	0	0	0
interest area.			

Der	mographics
17.	How old are you now?
18.	Do you belong to any of the following equity-deserving groups?
Sele	ect all that apply
	 □ Women □ LGBTQ2S+ □ Newcomers/immigrants □ Persons of color □ Indigenous peoples, including First Nations, Métis and Inuit □ Persons with disability □ None of the above □ Prefer not to answer
19.	Which most closely describes your race/ethnicity?
Sele	ect all that apply
	Black Arab Chinese Filipino Japanese Korean
	Latin American
	South Asian (including East Indian, Pakistani, Sri Lankan)
	Southeast Asian (including Vietnamese, Cambodian, Laotian, Thai)
	West Asian (including Iranian, Afghan)
	White
	First Nations
	Métis

☐ Other Indigenous community

☐ Inuk (Inuit)



	Other (please specify):
	Prefer not to answer
(se	lected Black for race/ethnicity)
20.	With which of the following Black ethnicities do you identify?
Sel	ect all that apply
	African Canadian Descent
	African
	Afro-Caribbean
	African American
	Afro-Latin
	Another (please specify):
	Prefer not to answer
21.	What is the highest level of education you have obtained?
	Some high school
	High school diploma
	Some college or university
	College diploma
	University degree
	Prefer not to answer
22.	What did you study?
Sel	ect all that apply.
	Agriculture, Animal & Related Practices
	Arts & Culture
	Business, Finance & Administration
	Career & Preparation
	Computers & Telecommunications
	Culinary, Hospitality, Recreation & Tourism
	Education, Community & Social Services
	Energy, Environmental & Natural Resources
	Engineering & technology
	Fire, Justice & Security





Health, Food & Medical
Media
Professions & Trades
Transportation & Logistics
Other (please specify):
Prefer not to answer



Appendix E: Semi-structured Interview Guide for Participants

- 1. Which parts of the ELITE Program did you complete? Probe: ELITE Assistants (high school), or ELITE Associates (university), or both?
 - a) When (what year) was that?
- 2. Was the internship you did as part of the ELITE Program good preparation for working in STEM?
 - a) What was useful about it?
 - b) What would have improved it?
- 3. Have the interpersonal relationship skills covered in the ELITE Program been helpful? If so, how?
- 4. When you consider the skills, knowledge, strengths and resources of the ELITE Program, which have been most helpful to pursue your career goals so far?
- 5. What aspects of the program stand out to you as having a lasting effect on your work life?
- 6. What has been your experience in STEM since participating in the ELITE Program?
 - a. If participating in STEM: How did the ELITE Program prepare you for those experiences?
 - b. What challenges have you experienced?
- 7. What else have you been up to since completing the ELITE Program internship?
 - a) How well did that work out for you?
 - b) How did the ELITE Program influence what you pursued following the program?
 - c) How did the ELITE Program help you get where you are now?
- 8. How interested are you in pursuing a STEM career?
- 9. If interested in pursuing a STEM career, what challenges do you expect with pursuing a STEM career?
 - a. How has the ELITE Program helped with how you address those challenges?
- 10. In your opinion, what other resources or training could the ELITE Program offer to support students' career pursuits in STEM areas?



Appendix F: Semi-structured Interview Guide for Staff and/or Partners

- 1. What was your (or your organization's) role with the ELITE Program for Black Youth?
 - a. For how long have/did you held/hold this role?
- 2. Why was this program needed?
 - a. What lessons can be drawn from how the program developed in response to these needs that can be shared with others in the skills development sector?
- 3. What have you learned about getting Black youth job ready for STEM careers from **the internship portion** of the program?
 - a. What went well?
 - b. What could be improved?
- 4. What have you learned about getting Black youth job ready from the entrepreneurship portion of the program?
 - a. What went well?
 - b. What could be improved?
- 5. What have you learned about getting Black youth job ready from the wellness and coaching portion of the program?
 - a. What went well?
 - b. What could be improved?
- 6. What are the greatest strengths of the ELITE Program?
- 7. What other changes would you recommend to make the program even more effective at getting Black youth job ready?