

Support Portal for Youth and K-12:

Insights on a Pilot Project With Peel District School Board











Partners























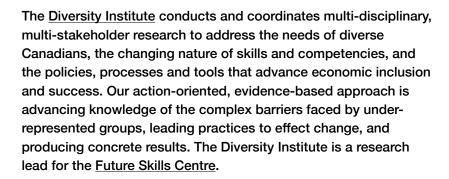












The Future Skills Centre (FSC) is a forward-thinking centre for research and collaboration dedicated to driving innovation in skills development so that everyone in Canada can be prepared for the future of work. We partner with policymakers, researchers, practitioners, employers and labour, and post-secondary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

The Peel District School Board (PDSB) is a racially, culturally and linguistically diverse board that serves 155,000+ students and approximately 17,000 employees. In PDSB, 87% of students are racialized, representing 162 different ethnic backgrounds. Students in Peel have 121 different first languages. Student diversity also exists in terms of gender and gender expression, sexuality and in terms of ability and faith. The PDSB's mission is to inspire success, confidence and hope in each student. We are committed to helping each child achieve to the best of their ability. PDSB's collective, daily efforts make a positive difference in the lives of our students, their families and the world.

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Background

This report evaluates the Future Skills & Careers (FSC) platform, designed to address systemic barriers that Black and racialized youth in Canada face when making career decisions. These barriers—rooted in socio-economic, cultural and educational disparities—are compounded by race and gender biases, limiting career opportunities. The FSC platform offers mentorship, digital skills training and career development tools to support students from underserved communities. By providing tailored resources, detailed career information and labour market trends, the platform empowers youth to explore emerging fields, improve career readiness and overcome challenges, ultimately helping them achieve long-term success.

Goals

The primary goal of the FSC platform is to create a comprehensive, accessible and dynamic resource for career exploration and understanding labour market trends. The platform seeks to support students, families, educators and guidance counsellors by offering consolidated resources that inform career decisions.

Key objectives include:

- > Consolidating labour market insights and educational opportunities
- > Developing a user-friendly website that integrates feedback from students, parents, teachers and counsellors
- > Seamlessly integrating with other educational platforms to enhance user experiences.

Design

The FSC platform is designed as a career-planning tool, with a focus on supporting K–12 students, particularly Black and racialized youth. The platform offers a wide range of features, including career exploration tools, success stories from Black professionals and resources to guide students through post-secondary education and career readiness. The design is user-centred, aiming to provide clear and actionable resources for career exploration and labour market insights.

Methods

A pilot project was conducted in partnership with the Peel District School Board to evaluate the FSC platform. Two high school classrooms were invited to test the platform and provide feedback through an online survey. The survey was open from May 16 to June 26, 2024, and received responses from 47 students, with 31 completing the survey. User feedback was analyzed descriptively to assess ease of navigation, content relevance and the overall usefulness of the platform.



Findings

The survey revealed that most users found the platform easy to navigate and the information provided relevant and helpful. Specifically:

67.8%

of users found the site easy to navigate, while 83.8% agreed that the platform's purpose was clear.

80%

of users agreed that the platform provided relevant career information, and 73.4% found the language easy to understand. 70%

The "Opportunities" page was highly rated, with over 70% of respondents finding it useful, although the "Prepare" and "Trends" pages had more mixed feedback, suggesting room for improvement in these areas.

Conclusion

The FSC platform demonstrates promise as a career exploration tool for Black and racialized students. Areas for improvement include simplifying the platform's navigation, updating content on emerging career fields and expanding interactive features such as quizzes and career planning tools. By addressing these gaps, the platform can better support students in exploring and planning their future careers.





This report evaluates the Future Skills & Careers (FSC) platform,¹ developed in response to the systemic barriers that Black and racialized youth in Canada face when making career decisions. These barriers, rooted in socioeconomic, cultural and educational disparities, are further compounded by race and gender biases, significantly limiting career opportunities for these youth. The platform was designed to address these challenges by offering critical resources like mentorship, digital skills training and career development tools.

A complex mix of socio-economic, cultural and educational factors shapes youth career choices in Canada. For Black and racialized youth, systemic barriers linked to race, gender and socio-economic status limit career options. These challenges include a lack of family capital, limited role models, insufficient career guidance and minimal support from the educational system. Additionally, gender stereotypes and racial biases further constrain career aspirations and outcomes.

Family knowledge and capital

Education plays a crucial role in shaping future employment opportunities. A high school diploma is an essential step toward post-secondary education and career advancement.^{2, 3} However, systemic inequalities disproportionately affect Black, Indigenous and rural youth, as well as those from lower-income communities. 4, 5, 6 Family socio-economic status strongly influences career decisions. Families with greater resources can offer tutoring and extracurricular activities, which increase access to prestigious professions.7,8,9 Research shows that students with parents in science, technology, engineering and mathematics (STEM) fields are more likely to acquire STEM-specific cultural capital, thereby fostering positive attitudes toward STEM. 10, 11

Conversely, many Black and racialized families work in lower-wage sectors like manufacturing and services, which limits exposure to professions like STEM, law and business. 12, 13, 14, 15, 16, 17, 18 Economic challenges restrict families' ability to support career exploration. Low-income families may be unable to afford extracurricular activities crucial for academic and career readiness. In disadvantaged



First-generation immigrant families may be unfamiliar with Canada's educational and career systems, leaving their children without the guidance to navigate post-secondary education.

neighbourhoods, limited access to resources like computers and the Internet exacerbates these challenges. Black youth face a "digital divide" that hinders their engagement in career exploration as the economy becomes increasingly digital.^{19, 20, 21, 22}

Parental knowledge also plays a significant role. First-generation immigrant families may be unfamiliar with Canada's educational and career systems, leaving their children without the guidance to navigate post-secondary education. ^{23, 24, 25} This lack of support puts racialized youth at a disadvantage in educational attainment. While over 90% of Canadian youth earn a high school diploma, the rate is significantly lower for Indigenous (44%) and Black youth due to socio-economic factors and biases in the education system. ^{26, 27} These disparities limit access to further education and career opportunities.

Absence of role models

Role models are essential in shaping career aspirations. Unfortunately, Black

and racialized youth often lack visible role models in high-status careers like STEM and law. Research shows that mentorship from individuals with shared identities can significantly enhance career aspirations and help overcome psychological barriers caused by systemic exclusion.^{28, 29, 30} This absence of representation creates psychological barriers, making it difficult for these youth to envision themselves in such professions. For instance, while 94% of Black Canadian youth aspire to obtain a post-secondary degree, only 60% believe it is achievable.³¹ Youth are more likely to pursue careers where they see professionals who resemble them.^{32, 33}

Racial and gender stereotypes further compound the issue. Women are underrepresented in STEM fields due to societal norms that portray these areas as "masculine," thus reducing their sense of belonging.³⁴ Similarly, Black youth receive societal messages suggesting certain careers are inaccessible to them, perpetuating exclusion. Black women face additional barriers, particularly in men-dominated fields like engineering and technology.^{35, 36, 37}

Limited knowledge of career options

Access to comprehensive career information is critical for informed decision-making. However, many Black and racialized youth lack detailed guidance, particularly in underresourced schools. Guidance counsellors in these schools often lack the resources or training to provide tailored advice, especially in emerging fields like technology and entrepreneurship.³⁸ Online platforms,

such as Ontario's Pathways website, focus primarily on self-assessment tools and offer little information on labour market trends, leaving many youth unaware of their career options.^{39, 40}

The digital divide further limits access to career exploration tools, as students from low-income households often lack the necessary technology. In Canada, 42% of low-income families do not have Internet access at home. ⁴¹ This problem is especially pronounced in rural and Indigenous communities, where broadband availability is even more limited. ^{42, 43, 44}

This lack of access to information and support services restricts career options for racialized youth. They are less likely to pursue prestigious career paths without adequate guidance, thereby perpetuating existing socioeconomic disparities.^{45, 46, 47}

Limited positive reinforcement

Limited positive reinforcement from teachers and counsellors significantly affects the career paths of Black and racialized youth. Systemic biases often result in these students receiving lower expectations, which reduces the encouragement they get to pursue higher education or prestigious careers. Practices like "streaming," where students are placed in vocational tracks based on perceived abilities, disproportionately affect Black students. This limits their access to post-secondary education and professional fields requiring advanced qualifications.^{48, 49, 50, 51}

These lowered expectations undermine students' confidence and discourage them from pursuing ambitious career goals. Over time, this creates a cycle of limited opportunities, where racialized youth are less likely to enter fields that require higher education, further perpetuating socioeconomic disparities. 52, 53, 54, 55, 56, 57

For women, particularly in men-dominated fields like STEM, these biases are compounded by gender stereotypes, creating additional barriers, such as a lack of role models and institutional support. These systemic factors collectively reduce the positive reinforcement needed for Black and racialized students to aspire to and succeed in high-status careers. ^{58, 59, 60, 61, 62}

Future Skills & Careers platform

In response to the systemic challenges
Black and racialized youth face, the Diversity
Institute collaborated with the Peel District
School Board to create initiatives targeting
these barriers. These programs emphasized
mentorship, digital skills training and career
exploration, and aimed to equip students from
equity-deserving groups with the resources
needed for long-term success.

The Study Buddy program linked Black and racialized students with mentors from professional fields such as law, accounting and entrepreneurship.⁶³ Through career exploration sessions and ongoing mentorship, students engaged with relatable role models, helping them visualize paths to success in fields often under-represented by their

communities. In addition to mentoring, students participated in digital skills training, attended entrepreneurship fairs and toured companies like CISCO. The program proved highly successful, with many students reporting increased confidence and a stronger understanding of their career paths after exposure to professionals with similar backgrounds.

Building on the success of Study Buddy, the Diversity Institute and Peel District School Board recognized the need for a comprehensive resource for underserved students. To address this, they created the FSC platform, a tool designed to help students from equity-deserving groups access career information and guidance more effectively. Through consultations with students, teachers and counsellors, the team identified key gaps in traditional career guidance platforms—particularly the lack of detailed information on career pathways, labour market trends and skills development aimed at Black and racialized youth.

The FSC platform was developed using resources like OpportuNext, Skills for Success and government databases. Unlike traditional career platforms focused mainly on self-assessment, this platform provides detailed labour market data, professional development insights and guidance on career pathways. It helps students explore emerging fields such as digital entrepreneurship and technology, equipping them with skills needed to thrive in a rapidly evolving economy.



The website also includes key sections for preparing students for post-secondary education, with links to admission requirements, application processes, résuméand portfolio-building, and scholarship opportunities for Black and racialized youth. Additionally, the platform connects students with part-time job opportunities, volunteer roles and entrepreneurship programs via platforms like Magnet. Through a focus on mentorship, the site provides access to coaching, career counselling and digital skills workshops, further enhancing students' career readiness.



The FSC platform aims to provide comprehensive, accessible and dynamic resources to support career exploration and labour market understanding for students, their families, educators and guidance counsellors.

Its core objectives:

- Resource Consolidation: Develop an informative website that centralizes valuable insights on labour market trends, career pathways and educational opportunities. This platform will serve as a one-stop resource, integrating existing materials to guide students and their support networks in making informed career choices.
- User-centred design and evaluation: Prototype the website with user engagement at its core, testing and evaluating feedback from diverse users, including students, parents, teachers and counsellors. This ensures the platform meets the needs of its audience while remaining user-friendly and effective.
- Operational integration: Define the functional requirements necessary to make the platform operational, ensuring seamless integration with other career and educational platforms such as Pathways, MyStartr and Magnet. This will enhance the user experience and expand the resources available to those seeking guidance in career planning.



The FSC platform is a comprehensive career planning hub to support K–12 students, especially Black and diverse youth, and their parents, teachers and guidance counsellors. Its goal is to provide essential resources for students to discover their strengths, explore career paths, and access actionable tools to achieve their goals. The site aims to inspire through success stories from Black professionals and provides a one-stop shop for scholarships, learning resources, mentorships and more.

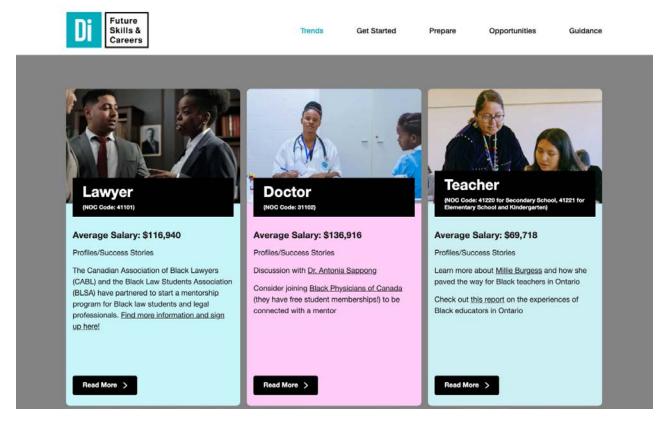
The development of the FSC platform involved The Tech Effect, contracted to create a microsite for testing demand for labour market information (LMI) and tools that support inclusive career pathing among K–12 students, teachers and guidance counsellors. The FSC platform aligns with Ontario career support guidelines to provide complementary information.

Key components of the website

Changing trends

The website offers insights into labour market trends, including data on occupations, industries, salaries and required skills. This information is sourced from reliable bodies like Statistics Canada. It also includes professional profiles, which provide detailed snapshots of careers—highlighting salaries, educational pathways and success stories from Black professionals. Students participating in the Peel District School Board summer co-op program informed these profiles, which helped identify career interests among youth. A total of 22 professional profiles are available (Figure 1).

Figure 1
Sample of profession profiles available on the Future Skills & Career platform



Source: MyStartr. (2024). Profession Profiles. https://mystartr.ca/careers/trends/

Get started

This page offers tools to help students assess their strengths, weaknesses and interests. Recommended quizzes, like the Multiple Intelligences Career Quiz, the Skills for Success Quiz and OpportuNext, help guide students toward suitable career paths. Additionally, this page encourages students to research career paths through informational interviews, networking and community involvement.

Prepare

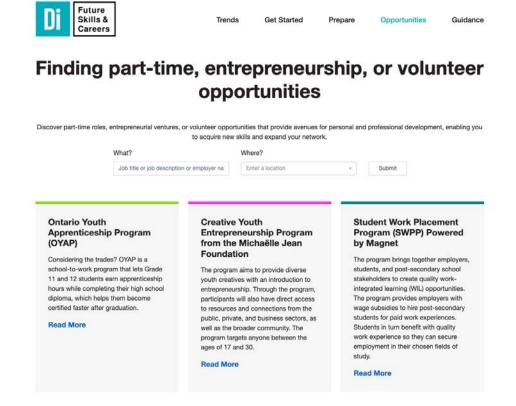
This page helps students bridge the gap between their skills and career aspirations. It offers guidance on post-secondary education options, how to research schools and understand admission requirements, and how to plan financially for higher education.

Opportunities

This section connects students to parttime jobs, entrepreneurial opportunities and volunteer positions. It integrates with the Magnet job search portal, providing a comprehensive job board with Magnet and the Canada Job Bank listings (Figure 2).

Figure 2

Job search functionality and opportunities available on the Future Skills & Career platform



Source: MyStartr. (2024). Finding part-time, entrepreneurship, or volunteer opportunities. https://mystartr.ca/careers/opportunities/

Guidance

This section offers further support, including resources for finding tutors, mentorship opportunities through programs like Study Buddy and access to free learning tools.





This report evaluates the effectiveness of the FSC platform by examining user experience, including interaction with the platform and opinions on its usefulness. A survey was conducted with the PDSB to achieve this.

As a pilot project, an information letter was shared with two high school classrooms, inviting students to test the FSC platform and provide feedback through an online survey. The survey was open from May 16 to June 26, 2024. A total of 47 students reviewed the website, and 31 completed the survey, resulting in a response rate of 66%.

The survey data was analyzed descriptively to assess user feedback on aspects of the website, including ease of navigation, the relevance of career information and the helpfulness of the resources provided. The results will inform future updates to the website, ensuring it meets the needs of its target users—Black and diverse youth, educators and career counsellors.

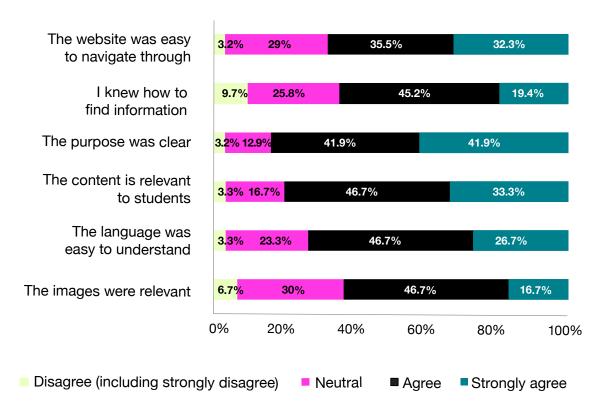




In evaluating user feedback on the FSC platform, the analysis focused on several key areas: accessibility, clarity of purpose and content relevance. The findings indicated that many users had a positive experience

navigating the website. Specifically, 32.3% strongly agreed and 35.5% agreed that the website was easy to navigate, with a small portion (3.2%) disagreeing and 29% remaining neutral (Figure 3).

Figure 3
Experience with the Future Skills & Careers website



Similarly, most users felt confident in finding information on the website, with 19.4% strongly agreeing and 45.2% agreeing, although 9.7% of users did not find the information easily and 25.8% were neutral. Additionally, 83.8% of users agreed or strongly agreed that the website's purpose was clear, while only 3.2% disagreed. Regarding content relevance, 80% of users agreed that the website provided relevant information to students, with just 3.3% disagreeing.

One area identified for improvement was the simplicity of the language. While 73.4% of users found the language easy to understand, a small percentage (3.3%) suggested that simplifying the language could further enhance comprehension, and 23.3% remained neutral. Regarding visual relevance, nearly two-thirds (63.4%) agreed that the images were suitable for the content, although 6.7% disagreed and 30% were neutral.

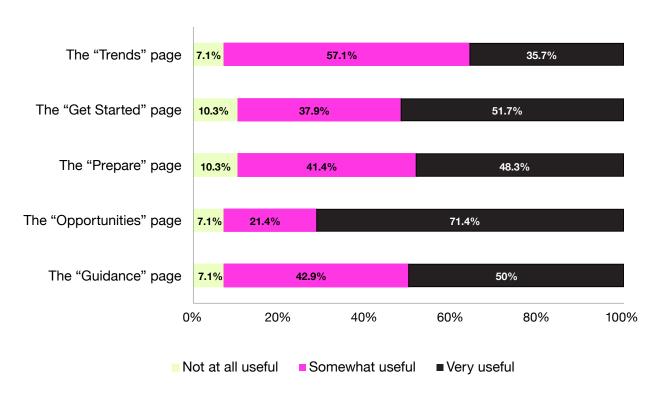


Usefulness of subpages

User feedback on subpages, including "Trends," "Get started," "Prepare," "Opportunities" and "Guidance," was overwhelmingly positive. About 90% of respondents found each of these subpages to be somewhat or very useful. The small proportion of disagreement, ranging from

7% to 10%, indicates that most users were satisfied with the subpages' content and structure. This response suggests that these subpages successfully meet the informational needs of the target audience, offering comprehensive resources for career exploration (Figure 4).

Figure 4
Usefulness of the subpages of the Future Skills & Careers website

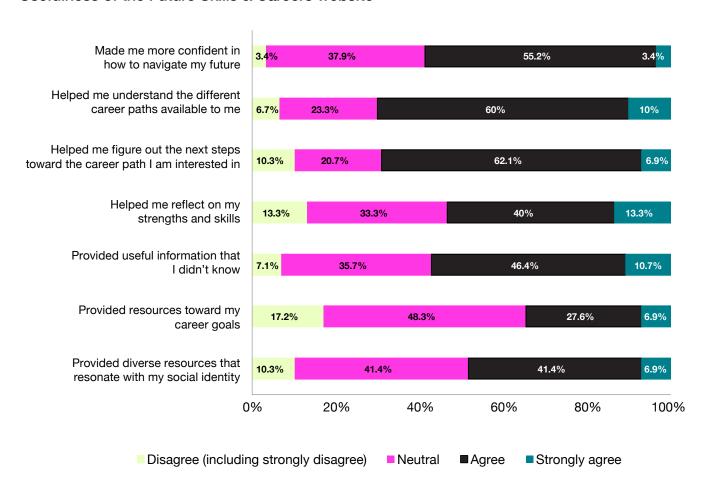


Perceived usefulness of website

The website's overall usefulness assessment revealed stable perceptions across seven different areas. For example, 60% of users agreed and 10% strongly agreed that the website helped them understand available career paths. Another 23.3% remained neutral, while 6.7% disagreed. A similar distribution was observed when users were

asked if the website helped them determine the next steps toward their desired career. Here, 62.1% agreed, 6.9% strongly agreed, 20.7% were neutral and 10.3% disagreed (Figure 5). These responses underscore the website's general effectiveness in guiding users and highlight opportunities to enhance clarity and user engagement in areas where neutrality or disagreement persists.

Figure 5
Usefulness of the Future Skills & Careers website

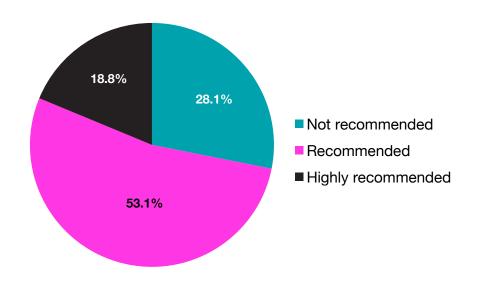


Recommendations and open feedback

The website's recommendation potential was also assessed. While 18.8% of users indicated they would highly recommend the website, a larger portion, 53.1%, expressed a general recommendation. However, 28.1% indicated they would not recommend the website, showing many users harbour reservations. This suggests that further improvements are necessary to increase the overall satisfaction and usability of the site.

Respondents also provided open-ended feedback. One user praised the website's quizzes, noting their usefulness in helping students start their careers. Additionally, two suggestions for improvement were made: incorporating interactive activities that align with students' skills and strengths and adding more diverse professional profiles, such as those in fashion marketing, to the "Trends" page (Figure 6).

Figure 6
Likelihood of recommending the Future Skills & Careers website





The findings demonstrate that the FSC platform is generally an effective tool for career exploration, particularly regarding accessibility and relevance. However, areas for enhancement, such as simplifying language, expanding interactive features and increasing the variety of profession profiles, would likely improve user satisfaction and increase the likelihood of users recommending the site.

The FSC platform is a promising resource for Black and racialized students, but there are clear opportunities to enhance its effectiveness by improving navigation, language and content. The platform was evaluated based on feedback from 47 students, with 31 responding to a survey. This section summarizes key findings and implications.



Key findings

Overall user experience

- > **Navigation:** 67.8% found the site easy to navigate, but 9.7% had difficulties, highlighting a need for simplification.
- > Clarity of purpose: 83.8% agreed the platform's purpose was clear, indicating effective communication.
- Content relevance: 80% found the information relevant, successfully addressing career guidance gaps for racialized youth.

Usefulness of subpages

- > The "Opportunities" page received high praise, with over 70% of user rating it useful.
- > The "Guidance" and "Get started" pages were also well received, but "Prepare" and "Trends" had more mixed feedback, suggesting content updates are needed.

Language and visuals

- > **Language:** 73.4% found the language clear, but a small group suggested further simplification.
- > **Images:** 63.4% felt the images were appropriate, but there is room to improve the images' relevance to career goals.

Career impact

- > **Understanding career paths:** 70% felt the site helped them understand career options, though 6.7% disagreed, indicating some need for clarification.
- Next steps: 69% felt supported in planning their next steps, but 31% were neutral or disagreed, pointing to gaps in actionable guidance.

Implications

Information relevance and accessibility:

The platform effectively serves its purpose but would benefit from enhancing the "Prepare" and "Trends" pages with updated labour market data and more detailed career advice.

User interface: Simplifying navigation and making key resources more accessible will improve the user experience.

Tailoring content: Simplifying language further and diversifying visuals to reflect more career aspirations will resonate better with students.

Building career confidence: More interactive tools like self-assessment quizzes could help students better understand their strengths and build confidence in career planning.



- 1 MyStartr. (2024). MyStartr Homepage. https://mystartr.ca/careers/
- Zeman, K. (2023, July 28). From high school, into postsecondary education and on to the labour market. Statistics Canada. https://www150.statcan.gc.ca/n1/pub/81-595-m/81-595-m2023004-eng.htm
- 3 Heyward, G. (2020). How states can better prepare students for life after high school. Center on Reinventing Public Education. https://crpe.org/how-states-can-better-prepare-students-for-life-after-high-school/
- 4 Denaro, K., Dennin, M., & Sato, B. (2022). Identifying systemic inequity in higher education and opportunities for improvement. *PLOS ONE, 17*(4), e0264059. https://doi.org/10.1371/journal.pone.0264059
- Deller, F., Kaufman, A., & Tamburri, R. (2019). *Redefining access to post-secondary education*. Higher Education Quality Council of Ontario. https://heqco.ca/wp-content/uploads/2020/02/Formatted-Access-Paper.pdf
- Finnie, R., & Mueller, R. E. (2017). Access to post-secondary education: How does Québec compare to the rest of Canada? *Actualité Économique*, 93(3), 441–474. https://doi.org/10.7202/1058428ar
- Tompsett, J., & Knoester, C. (2023). Family socioeconomic status and college attendance: A consideration of individual-level and school-level pathways. *PLOS ONE, 18*(4), e0284188. https://doi.org/10.1371/journal.pone.0284188
- 8 Yan, Y., & Gai, X. (2022). High achievers from low family socioeconomic status families: Protective factors for academically resilient students. *International Journal of Environmental Research and Public Health, 19*(23), 15882. https://doi.org/10.3390/ijerph192315882
- 9 American Psychological Association. (2017). *Education and socioeconomic status*. American Psychological Association. https://www.apa.org/pi/ses/resources/publications/education
- Archer, L., DeWitt, J., Osborne, J., Dillon, J., Willis, B., & Wong, B. (2012). Science aspirations, capital, and family habitus: How families shape children's engagement and identification with science. *American Educational Research Journal*, 49(5), 881-908. doi: 10.3102/0002831211433290
- 11 Chakraverty, D., & Tai, R. H. (2013). Parental occupation inspiring science interest: Perspectives from physical scientists. *Bulletin of Science, Technology & Society, 33*(1-2), 44–52. https://doi.org/10.1177/0270467613509367
- Statistics Canada. (2021, February 24). *Study: A labour market snapshot of Black Canadians during the pandemic.*The Daily. https://www150.statcan.gc.ca/n1/en/daily-quotidien/210224/dq210224b-eng.pdf?st=olShQwOZ
- Alook, A., Block, S., & Galabuzi, G. E. (2021). *A disproportionate burden: COVID-19 labour market impacts on Indigenous and racialized workers in Canada*. Canadian Centre for Policy Alternatives. https://policyalternatives.ca/ publications/reports/disproportionate-burden
- 14 Canadian Press. (2024, August 15). *Racialized workers less likely to be unionized: report.* Daily Commercial News. https://canada.constructconnect.com/dcn/news/labour/2024/08/racialized-workers-less-likely-to-be-unionized-report

- 15 McKinsey & Company. (2021, March 2). Almost half of the Black US workforce is in lower-paying, frontline-service industries. https://www.mckinsey.com/featured-insights/sustainable-inclusive-growth/charts/almost-half-of-the-black-us-workforce-is-in-lower-paying-frontline-service-industries
- 16 National Employment Law Project. (2024, April 8). Occupational Segregation of Black Women Workers in the U.S. https://www.nelp.org/insights-research/occupational-segregation-of-black-women-workers-in-the-u-s/
- 17 Wilson, V., Miller, E., & Kassa, M. (2021, June 8). *Racial representation in professional occupations: By the numbers*. Economic Policy Institute. https://www.epi.org/publication/racial-representation-prof-occ/
- Janice, G. A. (2022). Addressing and closing equity gaps: Increasing Black females' participation in career and technical education programs leading to high-wage, high-demand jobs (Publication No. 30689158) [Doctoral dissertation, Northwestern State University of Louisiana]. ProQuest Dissertations & Theses. https://www.proquest.com/openview/bf935e0a61af6e2143ff6d803925d3e9/1?pq-origsite=gscholar&cbl=18750&diss=y
- 19 NPower Canada. (2021, May 10). *Building the bridge to youth success: Overcoming the digital divide*. https://npowercanada.ca/digital-divide-executive-summary/
- 20 Shilcutt, K. (2021, March 29). Digital divide disproportionately affected education for Black and Hispanic children during pandemic. Rice News. Rice University. https://news.rice.edu/news/2021/digital-divide-disproportionately-affected-education-black-and-hispanic-children-during
- 21 Sanders, C. K., & Scanlon, E. (2021). The digital divide is a human rights issue: Advancing social inclusion through social work advocacy. *Journal of Human Rights and Social Work, 6*(2), 130–143. https://doi.org/10.1007/s41134-020-00147-9
- 22 Darko, A., Hinton, D., Horrigan, J., Levin, B., Modi, K., & Wintner, T. (2023, January 18). *How to close the digital divide in Black America*. McKinsey & Company. https://www.mckinsey.com/industries/public-sector/our-insights/closing-the-digital-divide-in-black-america
- 23 Nichols, L., Ha, B., & Tyyskä, V. (2020). Canadian immigrant youth and the education–employment nexus. Canadian Journal of Family and Youth, 12(1), 178-199. https://journals.library.ualberta.ca/cjfy/index.php/cjfy/article/view/29497
- 24 Mahoney, W. (Ed.). (2023, February). School and education. Caring for Kids New to Canada. https://kidsnewtocanada.ca/mental-health/school
- 25 Rae, J. (2018). *Making the grade: Immigrant youth in post-secondary education*. Crime Prevention Ottawa. https://cciottawa.ca/wp-content/uploads/Education-Report.pdf
- 26 Statistics Canada. (2017, December 12). *Education indicators in Canada: An international perspective, 2017.* The Daily. https://www150.statcan.gc.ca/n1/daily-quotidien/171212/dq171212a-eng.htm
- 27 Statistics Canada. (2017, November 29). Education in Canada: Key results from the 2016 census. The Daily. https://www150.statcan.gc.ca/n1/en/daily-quotidien/171129/dq171129a-eng.pdf?st=iFLzaUxl
- 28 Reddick, R. J. (2011). Intersecting identities: Mentoring contributions and challenges for Black faculty mentoring Black undergraduates. *Mentoring & Tutoring: Partnership in Learning, 19*(3), 319–346. https://doi.org/10.1080/1361 1267.2011.597121
- 29 Murrell, A. J., Blake-Beard, S., & Porter, D. M. (2021). The importance of peer mentoring, identity work and holding environments: A study of African American leadership development. *International Journal of Environmental Research and Public Health*, 18(9), 4920. https://doi.org/10.3390/ijerph18094920
- 30 Rasheem, S., Alleman, A.-S., Mushonga, D., Anderson, D., & Ofahengaue Vakalahi, H. F. (2018). Mentor-shape: Exploring the mentoring relationships of Black women in doctoral programs. *Mentoring & Tutoring: Partnership in Learning*, 26(1), 50–69. https://doi.org/10.1080/13611267.2018.1445443
- 31 Statistics Canada. (2023, January 18). A portrait of educational attainment and occupational outcomes among racialized populations in 2021. https://www12.statcan.gc.ca/census-recensement/2021/as-sa/98-200-X/2021011/98-200-X2021011-eng.cfm

- 32 Aschbacher, P. R., Li, E., & Roth, E. J. (2009). Is science me? High school students' identities, participation, and aspirations in science, engineering, and medicine. *Journal of Research in Science Teaching, 47*(5), 564–582. https://doi.org/10.1002/tea.20353
- 33 Osei, K. (2023, August 17). Bridging Barriers improving career opportunities for young people from ethnically diverse backgrounds. Trust for London. https://trustforlondon.org.uk/news/bridging-barriers/
- Meiksins, P., Layne, P., Beddoes, K., Acton, B., Lewis, M., Masters, A. S., & Roediger, M. (2018). Women in engineering: A review of the 2017 literature. *SWE Magazine*, *64*(2). 4-13 and 15. https://www.researchgate.net/publication/324014181_Women_in_engineering_A_review_of_the_2017_literature
- 35 LeBlanc, T., & Loyd, A. B. (2022). Freedom dreaming to STEM: A conceptual model for Black youth's racial and STEM identity development through social media. Frontiers in Psychology, 13, Article 944207. https://doi.org/10.3389/fpsyg.2022.944207
- 36 Heslin, P. A., Bell, M. P., & Fletcher, P. O. (2012). The devil without and within: A conceptual model of social cognitive processes whereby discrimination leads stigmatized minorities to become discouraged workers. *Journal of Organizational Behavior*, 33(6), 840–862. https://doi.org/10.1002/job.1795
- 37 Neal-Jackson, A. (2018). A meta-ethnographic review of the experiences of African American girls and young women in K–12 education. Review of Educational Research, 88(4), 508–546. https://doi.org/10.3102/0034654318760785
- 38 Basra, A. (2021). Bridging the gap: Addressing the labour market barriers of Black youth in Canada (Master's thesis, Simon Fraser University). Simon Fraser University Summit Repository. https://summit.sfu.ca/item/34530
- 39 Izuchi, M., & Obed., O. O. (2017). Influence of guidance and counselling on development of entrepreneurial skills among technical college students in Rivers State. *British Journal of Education*, 5(12), 21–32. https://eajournals.org/wp-content/uploads/Influence-of-Guidance-and-Counselling-On-Development-of-Entrepreneurial-Skills-among-Technical-College-Students-in-Rivers-State.pdf
- 40 Fearon, S. (2020, Winter). Anti-Black racism in education and Black students navigating the pandemic. ETFO Voice. https://etfovoice.ca/feature/anti-black-racism-education-and-black-students-navigating-pandemic
- 41 Kajeet. (n.d.) Canada's digital divide: How wide is it and can it be solved? https://www.kajeet.com/en/blog/canadas-digital-divide-how-wide-is-it-and-can-it-be-solved
- 42 Schwientek, S. (2023, April 19). First Nations high-speed internet access lagging behind Canadian average. CBC News. https://www.cbc.ca/news/indigenous/first-nations-high-speed-internet-access-lagging-behind-canadian-average-1.6815370
- Badran, H. (2023, September 12). Supporting Indigenous connectivity in Canada. Internet Society. https://www.internetsociety.org/blog/2022/11/supporting-indigenous-connectivity-in-canada/
- 44 Assembly of First Nations. (2024, April 5). *The Digital Connectivity Gap*. https://afn.ca/economy-infrastructure/ infrastructure/closing-the-infrastructure-gap/digital-connectivity/
- 45 Annie E. Casey Foundation. (2021, May 2). *The benefits of workforce exposure and career programming for youth and young adults.* https://www.aecf.org/blog/the-benefits-of-workforce-exposure-and-career-programming-for-youth-and-you
- 46 Laidlaw Foundation. (2023). The state of Black and Indigenous youth in Ontario: An examination of the experiences and impacts of policing on Black, Indigenous & racialized youth. https://youthrex.com/wp-content/uploads/2023/11/ The-State-of-Black-and-Indigenous-Youth-in-Ontario.pdf
- Barnes, N. (2022, February 1). *Career development for youth in low-income communities using Super's model.* NCDA. https://www.ncda.org/aws/NCDA/page_template/show_detail/266334?model_name=news_article
- 48 Follwell, T., & Andrey, S. (2021, May 13). *How to end streaming in Ontario schools*. Ontario 360. https://on360.ca/ policy-papers/how-to-end-streaming-in-ontario-schools/

- 49 James, C. (2020, July 15). Ending "streaming" is only the first step to dismantling systemic racism in Ontario schools. The Conversation. https://theconversation.com/ending-streaming-is-only-the-first-step-to-dismantling-systemic-racism-in-ontario-schools-142617
- 50 Costa, S., Langher, V., & Pirchio, S. (2021). Teachers' implicit attitudes toward ethnic minority students: A systematic review. Frontiers in Psychology, 12, 712356. https://doi.org/10.3389/fpsyg.2021.712356
- 51 Clandfield, D., Curtis, B., Galabuzi, G.-E., Gaymes SanVicente, A., Livingstone, D. W., & Smaller, H. (2014). Restacking the deck: Streaming by class, race and gender in Ontario schools. *Our Schools/Our Selves Special* Issue, 23(2), 1–192. Education Policy Institute. https://easywebdesignsolutions.com/georgemartell/email43/docs/OS%23114Restacking%20the%20Deck%20online.pdf
- Dowden, A., Williams, T., & Oliver, S. (2024). School counselors addressing racial disparities in education among African American students through an intersectional lens: A conceptual framework. *International Journal for the Advancement of Counselling*, 46. 426-440. https://doi.org/10.1007/s10447-024-09543-6
- 53 Geven, S., Batruch, A., & van de Werfhorst, H. (2018). *Inequality in teacher judgements, expectations and track recommendations: A review study*. Universiteit van Amsterdam. https://zoek.officielebekendmakingen.nl/blg-864911.pdf
- Gorard, S., Smith, E., May, H., Thomas, L., Adnett, N., & Slack, K. (2006, July). Review of widening participation research: Addressing the barriers to participation in higher education. A report to HEFCE by the University of York, Higher Education Academy, and Institute for Access Studies. https://dera.ioe.ac.uk/id/eprint/6204/1/barriers.pdf
- Fernández, D. P., Ryan, M. K., & Begeny, C. T. (2023). Gender expectations, socioeconomic inequalities and definitions of career success: A qualitative study with university students. *PLOS ONE, 18*(2), e0281967. https://doi.org/10.1371/journal.pone.0281967
- 56 Ellsworth, D., Harding, E., Law, J., & Pinder, D. (2022, July 18). *Racial and ethnic equity in US higher education*. McKinsey & Company. https://www.mckinsey.com/industries/education/our-insights/racial-and-ethnic-equity-in-us-higher-education
- 57 St. Mary, J., Calhoun, M., Tejada, J., & Jenson, J. M. (2018). Perceptions of academic achievement and educational opportunities among Black and African American youth. *Child and Adolescent Social Work Journal*, *35*. 499-509. https://doi.org/10.1007/s10560-018-0538-4
- Light, A. (2022, January 28). *How are gender stereotypes affecting perceptions of STEM careers?* World Economic Forum. https://www.weforum.org/agenda/2022/01/stem-science-women-gender-stereotypes-bias-equality/
- 59 Piloto, C. (2023, March 13). *The gender gap in STEM: Still gaping in 2023.* MIT Professional Education. https://professionalprograms.mit.edu/blog/leadership/the-gender-gap-in-stem/
- Tal, M., Lavi, R., Reiss, S., & Dori, Y. J. (2024). Gender perspectives on role models: Insights from STEM students and professionals. *Journal of Science Education and Technology, 33*. 699-717. https://doi.org/10.1007/s10956-024-10114-y
- American Association of University Women. (2020). *The STEM gap: Women and girls in science, technology, engineering and mathematics*. AAUW. https://www.aauw.org/resources/research/the-stem-gap/
- 62 Gaynair, M. H. (2017, May 23). *Learning while Black: I was streamed to fail*. HuffPost. https://www.huffpost.com/archive/ca/entry/learning-while-black-i-was-streamed-to-fail_b_16706474
- 63 Cukier, W., Elmi, M., Mo, G.Y., Smajda, A., Wilson, B. (2023) *Tutoring in the Age of COVID-19: A case study of the study buddy program.* Future Skills Centre. Diversity Institute.











