



Executive Summary

Pathways to Veterinary Medicine

Creating Educational Opportunities for Black Students in K-12



TITLE: Pathway to Veterinary Medicine: Creating Education Opportunities for Black K-12 Students

AUTHORS: Tanitiã Munroe, Desiree Sylvestre & Kenneth Gyamerah.

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Research and Development
Toronto District School Board
1 Civic Centre Court, Lower Level
Etobicoke, ON M9C 2B3
Fax: 416-394-4946

Centre of Excellence for Black Student
Achievement
Winston Churchill C.I.
2239 Lawrence Ave E,
Scarborough, ON, M1P 2P7

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Full Report will be available in June 2023.



Background

The Centre of Excellence for Black Student Achievement, in partnership with the Black Veterinary Association of Canada (BVAC), created the Pathways to Black Veterinary Medicine Program. The 6-week program (October- November, 2022) provided Black¹ students in grades 7 to 12 at TDSB with support and guidance about the requirements to apply to veterinary colleges and veterinary technician programmes, learn about the diverse career opportunities and education pathways to become Veterinarians or Veterinary Medical Paraprofessionals (e.g., Veterinary Technologists, Animal Care Attendants, Animal Hospital Managers, etc.). Throughout this program, Black students received support and mentorship as they gained knowledge about the veterinary medicine field.

Introduction

The veterinary profession is among the most underrepresented fields for Black students. Despite efforts to promote diversity, Black students remain significantly underrepresented in veterinary colleges and the discipline itself. The report aims to present findings from a program co-designed by the Centre of Excellence and Veterinary Association of Canada (BVAC) to support Black students learning about education pathways and careers in the veterinary profession in Canada.

Method

The data presented in this report derives from the Centre of Excellence for Black Student Achievement's survey conducted toward students at the program's end.

Results

Twelve students participated in the Pathways to Veterinary Medicine Program, and completed the survey.

¹ The term Black refers to individuals, peoples or communities of Black /African descent living in Canada. This may include, but are not limited to individuals or peoples from the Black diaspora with varying geographical, historical, cultural, national, ethnic, religious, and ancestral origins and influences (e.g. African, African -Canadian, Afro-Caribbean, Afro Latin, Afro indigenous, Afro- Europeans).



Participants Profile

Twelve students from different grade levels responded to the survey. Of the 12 students, 10 identified as female and 2 male. Regarding their racial identification 5 identified as Black Canadians, 2 as Black-African, 2 as Afro-Caribbean, and 2 preferred not to share.

Key Findings

The program successfully engaged Black students and generated interest in the veterinary profession. The main themes included:

- Black Students' Experience in the Program
- Facilitator Support & Mentorship
- Black Students' Sense of Belonging

Students responded to a diverse range of takeaways, including satisfaction with participating in the program, learning from Black veterinarian professionals and the diversity of careers in the veterinary profession and pathways that lead to a career in veterinary medicine. In addition, findings suggest that support and mentorship were also critical factors in supporting Black students' success in the program.

Black Students Experience in the Program

Figure 1: Satisfaction with program

On a scale of 1 to 5 (1 is "Very dissatisfied" and 5 is "Very satisfied"), how would you rate your overall experience with the Pathways to Veterinary Medicine program? You can choose any number from 1 to 5.

12 responses

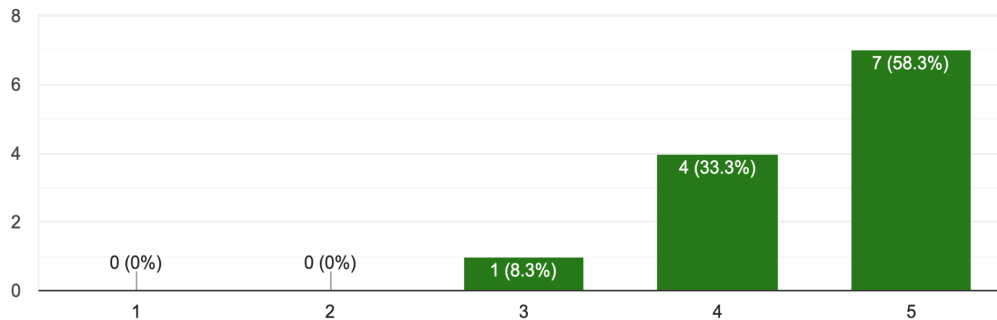


Figure 1 demonstrates that students reported being satisfied with the program and expressed interest in the diversity of careers in the veterinary profession, as well as pathways to becoming a veterinarian (~ 91%). Most importantly, the program successfully dispelled myths and negative stereotypes about Black students' interest and academic advancement in the veterinary profession. One student noted:

I learned about the huge veterinary community and how to get into Veterinary Medicine. (Which colleges, and courses to take,) I also learned about what I can do as a junior high student to plan my journey. (Study lots of science/biology, staying out of trouble, keeping my grades up).

(Student #7)

The program's most profound impact was seeing and sharing stories from Black professionals in the veterinary field. Students reported that hearing from Black veterinarians was inspiring and motivating. Their responses highlight the need for increased visibility and exposure of Black students to veterinary professions and veterinary profession pathways.

I still want to be a vet and it is really cool to see so many Black female vets!...I was impressed by all the vets' honesty and the way they answered all the questions so honestly.

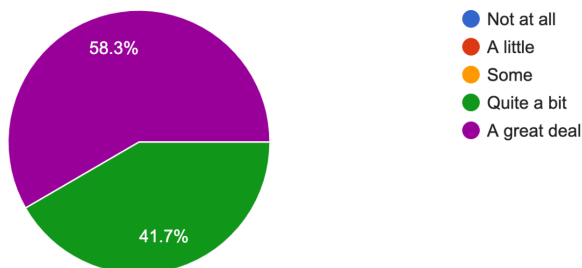
(Student #11)

Facilitator Support & Mentorship

Figure 2: Students' perception of caring adults in achieving their education and career goals

During the program, how much did you feel the facilitators cared about your progress and success in achieving your goals?

12 responses





The survey results also found that facilitator support and mentorship were critical factors in supporting Black students' success in the program. Figure 2 displays how students felt that the facilitators cared about their success and were supported and encouraged by them. However, while most students felt motivated to improve their grades in the program, only two-thirds felt they received feedback on tangible ways to improve their academic performance. More specifically, students mentioned that the visual examples and resources highlighting the veterinary medicine application process were helpful (see Figure 3).

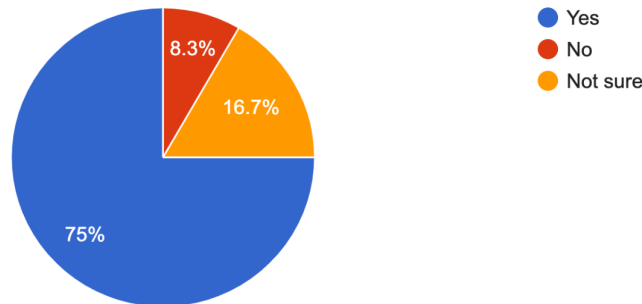
The visual examples helped us learn more about medicine and animals, and let us know about many Black people we have never heard of before.

(Student #4)

Figure 3: Students' perception of resources made available

Did the resources that facilitators share with students complement the goals of the Pathways to Veterinary Medicine program?

12 responses



A student's response echoes the sentiments of their peers about the amount of support and resources they received in the program:

They gave resources that can help us, for example, into applying for the vet school and what you need to apply for vet programs, and they still gave their experiences, for example, the interview into being accepted into the program.

(Student #5)



Overall, the program is one of many justifications for creating opportunities for Black students in STEM fields. This program exposed students to a greater representation of Black professionals in the veterinary discipline. Likewise, it provided students with adequate resources to enter veterinary programs and excel as qualified professionals in the field.

Black Students Sense of Belonging in STEM Programs

Many of the findings within this study confirmed that of previous research on Black students' sense of belonging in STEM. That is, participants highlighted the importance of relationships with others, specifically with the facilitators and peers, their sense of belonging and success in the program, and gaining first-hand knowledge about education and career pathways. Scholarship on Black students in STEM reveals that feeling a sense of belonging can significantly impact educational success and persistence, especially for Black girls. To understand Black girls' STEM learning experiences across contexts, authors have documented how Black girls translated their informal learning experiences into practice within their formal schools. When provided equitable learning opportunities, Black girls became agentic to continue engaging in STEM activities throughout the school year.²

As identified by student participants, learning from Black representatives from the field of veterinary medicine may influence their academic achievement and inclusion in STEM. Advancing academic achievement and representation in STEM include Black students' educational choices to support their pathways into post-secondary education, which may become useful in their retention and success.

I learned about all the different types of vets and it gave me a better idea of which kind of vet I'd like to be and what courses I need to take. I like that they were all black people too.

(Student #3)

It is also important to note how Black students legitimately experience belonging, including their overall well-being, and how their teachers and peers view and treat them in K-12 classroom spaces³. In addition, other factors enhance students' sense of belonging, and many of these disproportionately affect underrepresented STEM students—for example, multiple academic and environmental interventions such as after-school programs.

² King, N. S. (2022). Black girls matter: A critical analysis of educational spaces and call for community-based programs. *Cultural Studies of Science Education*, 17(1), 53-61.

³ Rainey, K., Dancy, M., Mickelson, R., Stearns, E., & Moller, S. (2018). Race and gender differences in how sense of belonging influences decisions to major in STEM. *International journal of STEM education*, 5, 1-14.



Recommendations

The Black students who participated in the program made the following recommendations:

- Increase visibility and exposure of Black students to veterinary professions and veterinary profession pathways through mentorship programs and outreach efforts.

“Try advertising programs in other common locations students are at, such as Libraries, Community Centers, etc”.

- Provide Black students with more opportunities for an immersive in-person experience with animal or pet care.
- “I think doing in-person workshops would be a great idea as it would be very helpful to actually see how vets work”. Provide ongoing mentorship and support for Black students interested in the veterinary profession to ensure their success in the program.

“It was a great session, and I am thankful to the veterinary professionals for taking time out of their day to teach us”.

- Provide resources and support for Black students to improve their academic performance and achieve their goals in the program.

“I am excited that I was able to learn more about biology in high school and college from the Black Vets! I wish the staff at our schools made Black students know what we need to succeed in these fields”

- Continue opportunities to highlight the pathways into the profession, specifically the application process.

“The Centre and other schools need to do this type of program all the time and advertise it more to us and our families”

In summary, this report highlights the importance of addressing the underrepresentation of Black students in the veterinary profession. The findings suggest that providing opportunities for Black students to engage with the profession, receive mentorship and support, and dispel negative stereotypes can help increase their representation in the field. With ongoing efforts and support, we can work towards a more diverse and inclusive veterinary profession in Ontario.



References

- King, N. S. (2022). Black girls matter: A critical analysis of educational spaces and call for community-based programs. *Cultural Studies of Science Education*, 17(1), 53-61.
- Rainey, K., Dancy, M., Mickelson, R., Stearns, E., & Moller, S. (2018). Race and gender differences in how sense of belonging influences decisions to major in STEM. *International journal of STEM education*, 5, 1-14.