

Team Umoja

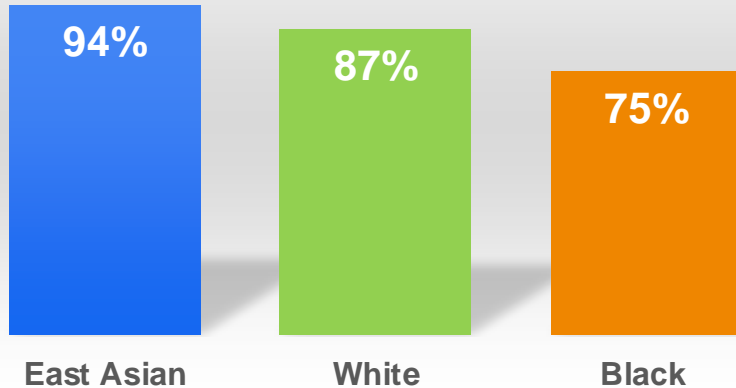


Dismantling barriers and forging a
pathway for Black excellence

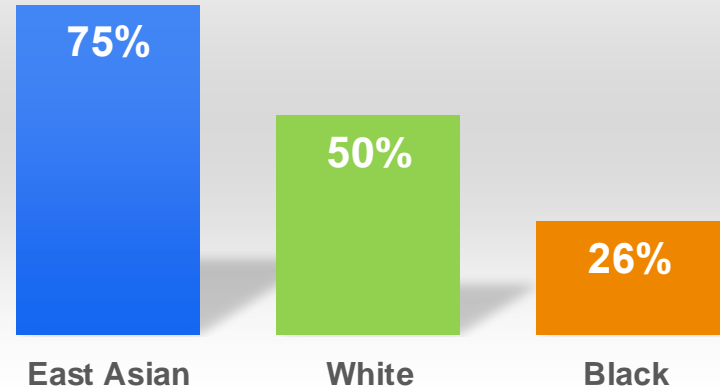
- Canada faces a shortage of skilled workers in science, technology, engineering, and mathematics (STEM), and Black people are underrepresented amongst those workers. Canada's 1.5 million Black people participate in STEM education and in the workforce at disproportionately low levels.
- Team Umoja, a grassroots collective of parents, educators, and STEM professionals has worked to increase Black youth's presence in STEM. Team Umoja introduces Black youth in the GTA to STEM through participation in the First© Robotics Competition (FRC), fostering cooperative competition and enhancing educational outcomes of Black youth.
- "Umoja," means "UNITY" in Swahili and reflects the collective effort to empower Black youth and bridge the gap in STEM representation by dismantling barriers to their participation.

- Fixing the underrepresentation of Black youth in STEM can address the STEM skills gap in Canada's economy. But to solve this problem, we must address the high school graduation and university enrollment challenges facing Black youth.

High School Graduation Rates - TDSB



University Enrollment Rates - TDSB



*** Disparities in postsecondary transitions, invisible gatekeeping and inequitable access to rigorous upper year curriculum in Toronto, Ontario - May 2023 Wilfrid Laurier University York University***

- The achievement gap among Black youth stems from various factors: racial discrimination, socio-economic challenges, disproportionate discipline in elementary and high school, and educators steering them away from academic paths.
- In Canada, the achievement gap does not arise from a lack of ambition but a lack of belief. 94% of Black youth express a desire for a Bachelor's degree or higher, but only 60% think it's attainable. This gap between ambition and belief is unique to Black youth in Canada.

- In 2018, Team Umoja was established to tackle the achievement gap of Black youth and increase their engagement in STEM. Umoja operates under ACCN, a Toronto-based, registered charitable organization focused on empowering Black youth and families by providing resources to overcome systemic barriers.
- Team Umoja operates at the Lassonde School of Engineering at York University at its Keele Campus in a neighbourhood that is nearly one-fifth Black and adjacent to Jane and Finch.

Each year Team Umoja...

- Enrolls 35 Black youth (ages 10 to 18) who participate in a cooperative competition in the global First © Robotics Competition (FRC)
- Empowers Black youth to gain self-confidence as they build a competitive robot that performs specific tasks
- Warmly welcomes all Black youth and fosters an inclusive environment in line with its commitment to be free of discrimination according to the Ontario Human Rights Code



2018 - 2022 Mentor
Grantley Blenman (B.Sc.)
University of Waterloo
graduate, retired physics
teacher and recipient of
2016/2017 Prime
Minister's Award for
Teaching Excellence



2019 - 2022 Mentor
Yusuf Odebyi (P.Eng),
engineer, mathematics
and robotics department
head at the TDSB and
mentor to 2014 World
Championship qualifying
team



2023 - 2024 Mentor
Professor Solomon
Boakye-Yiadom (Phd),
an Associate Professor
in the Department of
Mechanical
Engineering, York
University



Team Umoja empowers Black youth through robotics

Participants Say

“Umoja was a place where I really found a home and a family full of people who were pushing me and motivating me to do my best.”

“Before this, I was so nervous to speak in front of other people. But Umoja really gave me the confidence boost to help me to share my message with other people.”

“And so this has helped me realize that I can be so much more than what I thought. And I do have the power to be a future problem solver.”

“I actually got to be one of the people who sketch our art game design. I got to learn the designing process...improve my public speaking skills.”

Parents Say

“Umoja provides a space where they can learn, be themselves without the fear of being judged or told that they don't belong there.”

“This is such a unique opportunity. There aren't many spaces for black students who are interested in STEM.”



291 Black youth have participated in Team Umoja

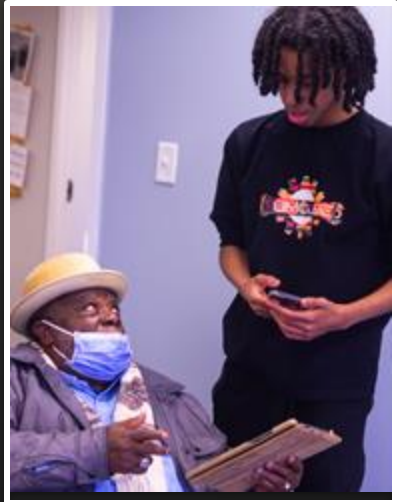
100% of our
participants
have graduated
from high
school

100% of our
participants
have been
accepted to
post-secondary
education

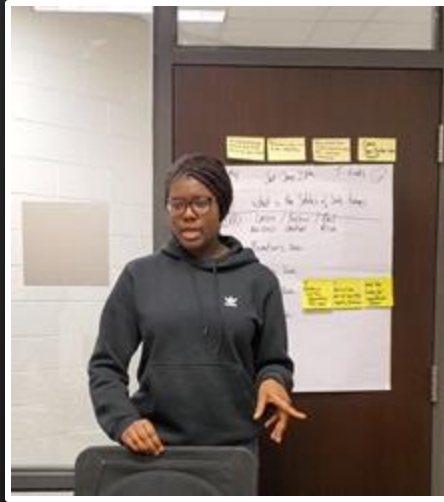
90% pursue
STEM at Post
Secondary

Based on annual data collected by Team Umoja

Black youths who participate in Team Umoja become leaders



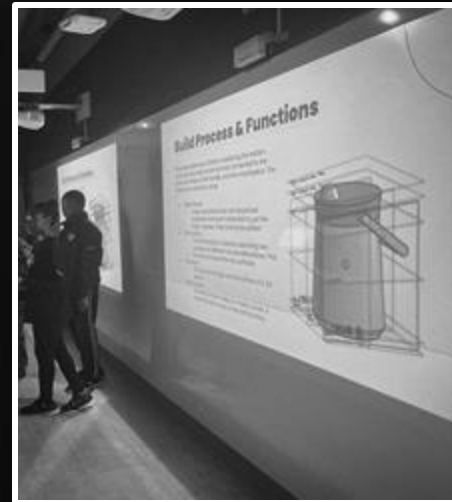
Community Service



Project Management



Marketing



Design

BLACK YOUTH WHO PARTICIPATE ON TEAM UMOJA DEVELOP

- Confidence in STEM
- Analytical, problem-solving, strategic and critical thinking skills
- A sense of comfort and belonging in STEM
- Experience in creating a Black community of excellence in STEM



BLACK YOUTH ON TEAM UMOJA GIVE BACK TO THE COMMUNITY

- In 2024, Team Umoja won the First Impact Award at the Scarborough District Championship
- The First Impact Award honors the team that best represents a model for other teams to emulate and best embodies the mission of FIRST—to provide life-changing robotics programs that give young people the skills, confidence, and resilience to build a better world



TEAM UMOJA PERFORMS ON THE FIELD

- Team Umoja also qualified for the quarter finals at the Durham District Championship.
- It placed second at the Scarborough District Championship.



TEAM UMOJA PERFORMS ON THE FIELD

- At the Provincial Championship, Team Umoja finished 3rd in the qualification rounds in the Science Division, and it qualified for the semifinals in the elimination round.



TEAM UMOJA PERFORMS ON THE FIELD

- Team Umoja finished 6th of 140 teams in Ontario.
- The team competed at the World Championships in Houston, Texas, April 17-20, 2024.



Where are Team Umoja's alumni now?



Toronto
Metropolitan
University





- **Empowering Black youth through participation in the First© Robotics Competition is expensive**

	District	Provincial	Worlds	Total
Registration	\$8800	\$5200	\$10000	\$24,000
Travel	\$3000	\$3000	\$30000	\$36,000
Parts				\$40,000
Grand Total				\$100,000

- **Team Umoja relies on donations unlike many of the participants in the First© Robotics Competition on other competitive teams, many participants on Team Umoja cannot afford the program fee**



Team Umoja Needs Your Help

How your generous gift could help Team Umoja

- **\$3,000** pays to transport the Robot and Drive Team to Competition
- **\$5,000** pays for 30 students to register for Provincial Championship
- **\$12,000** pays for spare parts and tools used by the Pit Crew during competition
- **\$15,000** pays for parts and tools to build the Robot



Sponsorship	Supporter \$500 - \$999	Bronze \$1,000 - \$2,499	Silver \$2,500 - \$4,999	Gold \$5,000 +
Official Donation Receipt	✓	✓	✓	✓
UMOJA Team 7712 T-Shirt	✓	✓	✓	✓
Personalized Thank you email	✓	✓	✓	✓
Sponsorship Acknowledgment	✓	✓	✓	✓
Sponsorship Certificate		✓	✓	✓
Name Listed on Promotional Materials		✓	✓	✓
Invitation to Competitions as Honoured Guest			✓	✓
Recognition on Website and Social Media			✓	✓
Your logo displayed on the robot				✓