2021
ANNUAL
REPORT

TRANS FORMA TION

visions
OF SCIENCE

Words from the **Organization**

From the Board Chair and CEO

This past year was one of **transformation** for Visions of Science.

We adapted our programs by developing **new and innovative virtual offerings** in response to the emerging needs of our communities throughout the COVID-19 pandemic. We enhanced the way that we work together by developing **new internal processes and frameworks** to guide the sustainability of our intended impact while also **bolstering equity at all levels** of the organization. We **refreshed our mission** by articulating a new bold purpose to reflect the change that we know is possible: **Transforming communities, society and the planet through equitable access to STEM.**

This annual report showcases our work from September 2020 to December 2021 and highlights that we continued to deliver strong outcomes despite the challenges that came with the pandemic. We are grateful for the hard work and leadership of our staff team, and board of directors who took on the task of rapidly adapting during uncertain times. We are thankful to our partners, donors and funders who continued to, and in many cases, increased their support! We would not have been able to make it through this year without you. Thank you!

Lastly, to the participants and communities that we have the honour of partnering with. You encourage us to grow, dream and believe way past any limitations! Thank you for always inspiring us.

As we look to the future with a refreshed mission, we are affirmed in our values and purpose. We are confident that we will continue to shift and shape the future of STEM for the better.

Dr. Eugenia Addy
CEO,
Visions of Science

Keddone Dias
Board Chair,
Visions of Science

Thank you to our 2021 Board of Directors and Staff Team who helped make this work possible! Learn more at vosnl.org/our-team

This annual report covers work between September 2020-December 2020 and January-December 2021.

Visions of Science

Our Mission

Visions of Science is a charitable organization on a mission to transform communities, society, and the planet through equitable access to STEM (Science, Technology, Engineering, and Math).

Our Focus

We are committed to advancing STEM equity by focusing our effort towards youth and communities who experience significant barriers to participation. We facilitate community-based youth engagement, strengthen youth support networks, and advocate for systems that ensure equitable STEM education and opportunity.

Our Impact

Through our programming, we aim to develop youth who are:

Curious - with positive perceptions of STEM and interest in further learning

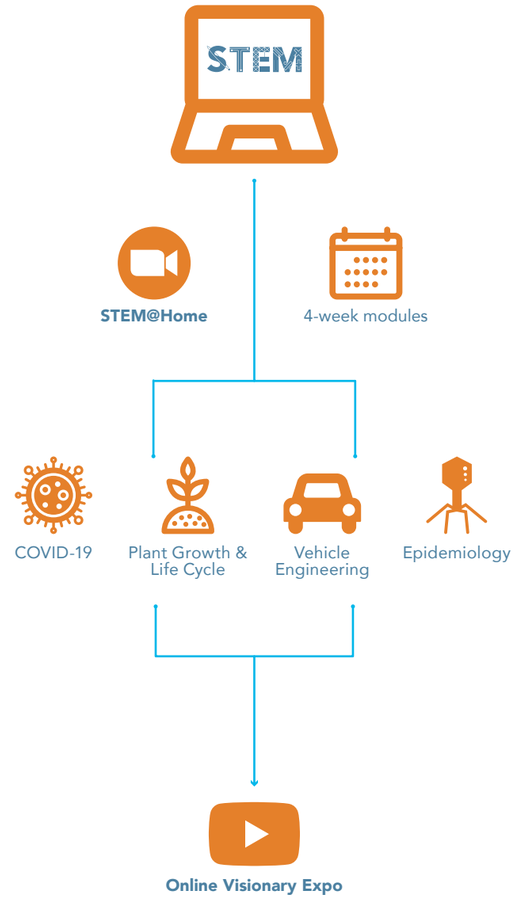
Confident - with demonstrating an understanding of their strengths, a growth mindset, and the belief that they can pursue and be successful in STEM

Competent - with awareness, knowledge, and skills developed in both STEM as well as socio-emotionally, and

Connected - with strong relationships with their peers, community, and networks

Our work will radically transform the STEM landscape and result in **more** youth persisting in STEM, **more** STEM graduates, and **more** youth in STEM careers. We believe that when youth understand the possibilities within STEM and have unhindered access to explore every opportunity, they have the full power to choose how they contribute to shaping the world around them. They are empowered with the relevant skills and knowledge to be leaders in their community, agents of change for society, and good stewards of the planet.

Digital Transformation: Virtual **STEM** Clubs



330 youth engaged across the GTA

1,000+ views of our Visionary Expo livestream event

We pivoted our weekly STEM Clubs program to online sessions where youth engaged in 4-week modules with topics including COVID-19, plant growth and life cycle, vehicle engineering, and epidemiology.

Each participant received their own curriculum kit which included all of the supplies that they needed for their curriculum projects. Chromebooks were also provided to participants who indicated that they did not have access to a computer.

Our annual **Visionary Expo** was adapted to an online virtual reality showcase where participants engaged in a culminating challenge. This final online event was live-streamed for participants, families, and partners on YouTube.

Virtual **STEM** Clubs: Impact

86% of participants found STEM more enjoyable

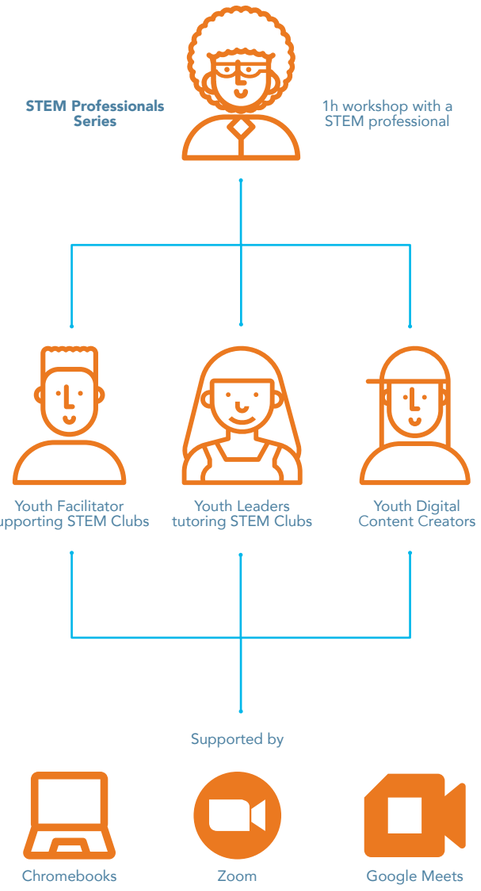
83% of participants felt more confident that they can do well in science

83% of participants reported increased persistence through challenging problems

"My understanding capacity has gotten bigger and I learned things that I might have not ever done if it wasn't for Visions of Science, Like I would have never made a motor working car and learned about how to use and add a motor."- Participant

"During the science club, I think it was when they were doing their plant experiments, and they were talking about qualitative and quantitative stuff. I know that there was an instance in her school class where they spoke on that, and she was able to answer questions surrounding that specifically because she did learn that in the science club." - Parent/Guardian

Digital Transformation: Virtual **STEM** Leaders



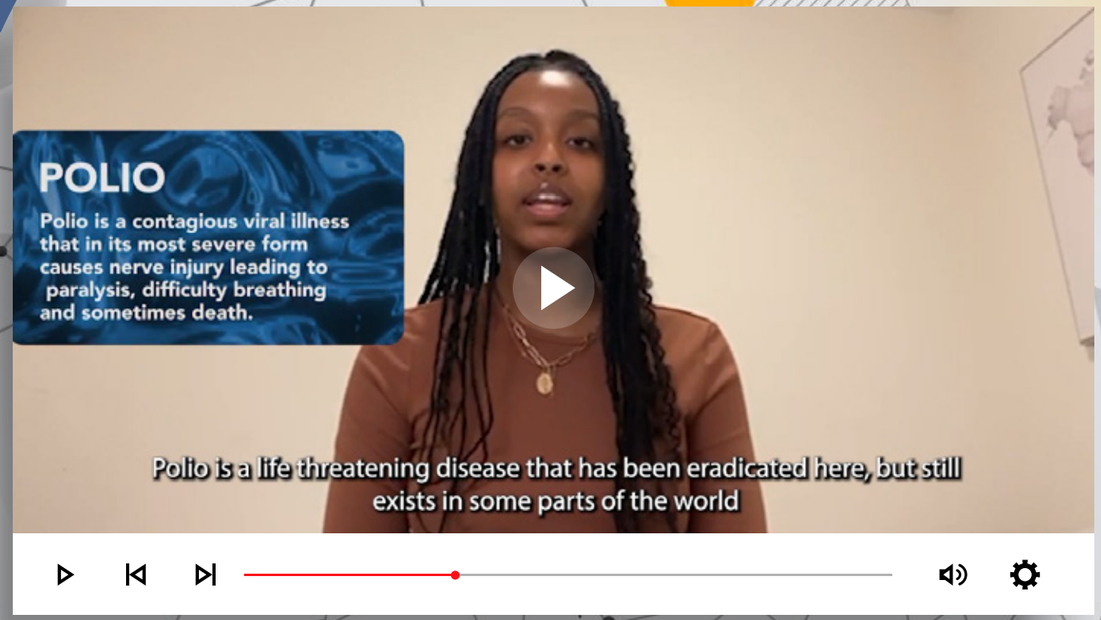
61 youth engaged across the GTA

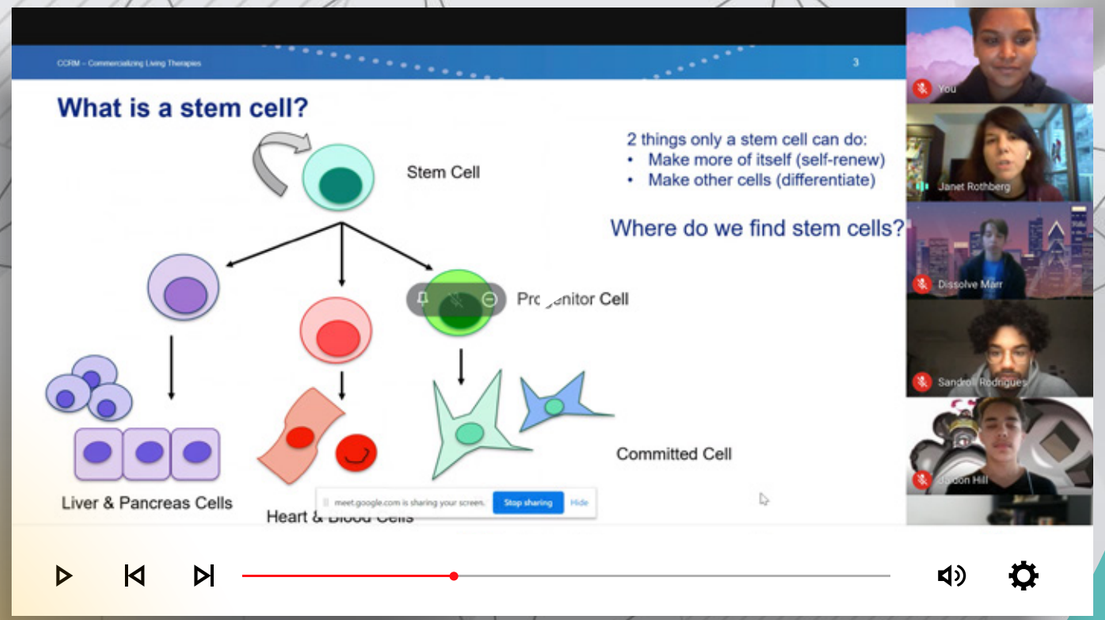
3,000+ hours invested back into their communities

We adapted our STEM Leaders program to an online context where youth continued to develop and lead. Youth engaged in career exploration opportunities through a virtual "STEM Professionals Series" that featured one-hour workshops with representative STEM field professionals in health, finance, engineering, tech, research, and more.

The "Youth Facilitator" leadership role was modified to have youth supporting participants in the virtual STEM Club program. Additional leadership roles were developed and included youth engaging as tutors for STEM Club participants and as peer mentors for one another.

Youth also engaged as digital content developers where they were trained to create video and blog content that was showcased on our online platforms. As with STEM Clubs, youth who did not have access to a computer also received a Chromebook to facilitate their participation.





Virtual **STEM** Leaders: Impact

86% of youth reported improvements in their leadership skills

84% of youth who participated in the STEM Professionals Series reported increased knowledge of STEM careers

80% of youth indicated increased understanding of career pathways

"It felt amazing to be able to make an impact on a greater level!! I truly believe the skills (especially time management and leadership skills) that I've gained this term have really prepared me for not only university but anything in the future, to be honest."- Youth STEM Leader

"My program facilitator really helped me break my 'bubble of comfort' as I was more of the quiet ones and not really open at first because I have never met my team, let alone the kids at this club. But throughout they supported and helped me and now I'm in a position where I can lead and do more in this online environment."- Youth STEM Leader

"Because of the guest speakers and mentors, I was able to improve my awareness of STEM careers, post-secondary pathways and education and career planning. I was able to learn about the different careers and the different paths you can take. I learned more about career planning and how to find and decide the career you want to take."- Youth STEM Leader

Digital **STEM** Report

After implementing our first completely virtual program year, we took time to reflect deeply and intentionally on the new challenges and opportunities that became our reality in this increasingly digital world.

Read our recent report Equitable STEM Engagement in the Digital Era to learn more about our findings and recommendations consolidated from our transition to virtual programming. In this report, we candidly detail the limitations and opportunities associated with transitioning community-based STEM programming to a virtual context across four themes: Digital Access, Remote Programming, Individual Participation, and Learning at Home. [Read More]

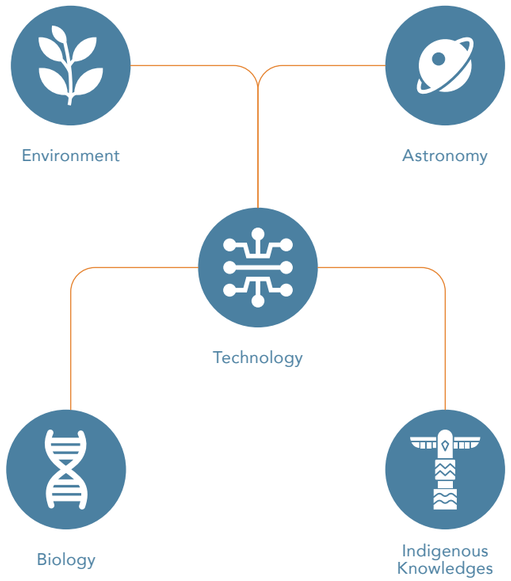
Digital Future: **STEM Sparks**

In the fall of 2021, we piloted our first fully virtual program "STEM Sparks". The main program objectives were to: exemplify how STEM can be used for social change by introducing youth to representative role models in various STEM
fields and careers; and provide academic support for youth with homework they were challenged with.

This online program ran bi-weekly on Saturdays and included custom STEM streaming sessions paired with homework help.

The STEM sessions covered topics in biology, space, technology and Indigenous ways of knowing. We cannot wait to integrate the outcomes of this program as we look to return to in-person and hybrid programming.

Topics



The **STEM** Future

More STEM Leaders, More STEM Graduates, A New STEM Future

The STEM Leaders program for youth ages 13-18 was launched in 2017 in response to growing demand from the community to build on the learning facilitated in STEM Clubs. The immersive program is directed towards the pursuit of post-secondary education, advanced career aspirations and developing leadership skills.

Since 2017 we have engaged 138 STEM Leaders and counting!

Visions of Science is proud to have a legacy of long-term engagement in communities. These youth leaders exemplify the impact and opportunity of this type of investment and show that the future of STEM is certainly bright!

Sara Kydd, Grade 11

Community: Regent Park
Visions of Science Participant: 3 years
STEM Leader Roles: Content Developer, Peer Mentor, Youth Facilitator, Visionary Tutor, Internship student with Dunlap Institute for Astronomy & Astrophysics at UofT

Who Are You?

I am an ambitious, hardworking, well-rounded, community-oriented and STEM-loving high school student. I am a proud Somali-Canadian and Muslim. I am the head of my school's Afro-Canadian club where we discuss anti-Black racism and plan events such as our Black History month assembly. I am also a Peer Mentor for grade 9 and 10 students in the Pre-IB program, where I support the students' success in the rigorous IB program by developing workshops, and sharing my learnings. My own hobbies include reading non-fiction and manga, working out, painting, volunteering, and watching anime.

Why STEM?

I've always been interested in the medical field, but my specific interest in dermatology developed when I partook in Visions of Science's Leaders in Training program. I received mentoring about career planning and goal-setting while applying my leadership skills by guiding a group of younger participants through their summer project. After reflecting intentionally about my ideal lifestyle and career, I discovered my passion to become a dermatologist because of the opportunities to contribute to research and my personal connection. Within the field, there is much more to learn regarding certain conditions that do not have a well-defined cause. Therefore, I am looking forward to contributing to the field with my future research to improve treatments.

What's Next?

I am prepared for the lifelong journey that I will take as a student of medicine who is consistently learning. I will have to go through undergraduate studies, medical school and residency, while completing many exams along the way, I hope to become a dermatologist that will improve the lives of many people, specifically patients who are seeking a safe space and students of colour wanting to become a doctor.

Marques McLean Robinson
Grade 12

Community: Driftwood
Visions of Science Participant: 10 years
STEM Leader Roles: Youth Facilitator, Content Developer, Visionary Tutor, Peer Mentor, Internship student with Dunlap Institute for Astronomy & Astrophysics at UofT

Who Are You?

I am a team player who enjoys coming up with innovative solutions to different problems and helping others build their skills to be able to do the same. I am a lifelong learner, and I use the knowledge I have gained from my academic studies to support and build up my community in my free time. I also want to give back to my community. I have already been able to partake in fulfilling opportunities as a community ambassador, such as facilitating STEM Clubs in which modules are run to educate children in grade school about STEM subjects, volunteering at a community barbecue and being on the committee that designed a resource room for our building.

Why STEM?

I am passionate about the sciences, in particular chemistry and quantum physics. I plan on specializing in quantum physics in my post secondary studies. The aspect of quantum physics that excites me the most is the fact that it explores the very nature of the universe and everything in it. I want to immerse myself in the subject and learn everything I can about it to be a part of something bigger than myself and enact positive change no matter how big or small. When I became a Youth Facilitator, I found myself giving the knowledge instead of receiving, which gave me happiness I didn't think I would have in teaching. Visions has provided me with training to help maximize my facilitation potential - which empowered me to better help others.

What's Next?

In life, I want to come up with more efficient ways of accessing technology to complete everyday tasks, making technology and tools more accessible to the broader community. In the future, I will use my knowledge in quantum physics to continue helping my community by engaging in activities similar to what I do with Visions of Science. I want to be able to facilitate STEM-based mentoring to people of all ages once I reach a level of expertise in my field.

Financial Summary

All financial data presented is from our 2019 financial statements audited by Pennylegion Chung LLP for the period January 1, 2019 to December 31, 2021. For a full copy of our 2021 audited financial statements, please visit: vosnl.org/finance-andtransparency.

STATEMENT OF OPERATIONS AND CHANGES IN NET ASSETS FOR THE YEAR ENDED DECEMBER 31, 2021

	2021	2020
REVENUE		
Contributions	$ 2,211,136	$ 1,248,387
Canada Emergency Wage Subsidy (CEWS)	208,965	65,653
Events	4,328	-
Interest and other	4,064	749
	$ 2,428,493	**$ 1,314,789**
EXPENSES		
Personnel	$ 906,935	$ 722,095
Program	128,107	127,690
Fundraising	78,508	5,409
Occupancy	63,016	58,707
Professional fees	44,898	17,056
Office and general	44,858	24,231
Insurance	6,123	4,643
Amortization	11,587	23,365
	$ 1,284,032	**$ 983,196**
EXCESS OF REVENUE OVER EXPENSES FOR THE YEAR	1,144,461	331,593
Net assets, beginning of year	512,004	180,411
NET ASSETS, END OF YEAR	**$ 1,656,465**	**$ 512,004**

Our **Supporters**

Funding Partners

Visions of Science gratefully acknowledges gifts received between September 1, 2020 and December 31, 2021. We would like to thank our numerous individual donors, many of whom support us monthly. We also acknowledge those who gave to the organization anonymously.

Visionaries

Ontario Trillium Foundation / Fondation Trillium de l'Ontario
An agency of the Government of Ontario / Un organisme du gouvernement de l'Ontario

TORONTO FOUNDATION
The Art of Wise Giving™

The Counselling Foundation of Canada

NSERC CRSNG

AMGEN

TD THE READY COMMITMENT

Champions

Propeller Project
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THE W. GARFIELD WESTON FOUNDATION

The Flannagan Foundation

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love where you live

The Ralph M. Barford Foundation

Gerry Egan Children's Charity

Ambassadors

Beutel Goodman Charitable Foundation
E.W Bickle Foundation
The Lawson Foundation
Better Toronto Coalition Grant
CanadaHelps Black Solidarity Fund
AMD ATI Technologies
The Sheila Kirpalani Foundation

Builders

Benevity
The Acapella Foundation
AECON Group Inc.
Barrick Gold Corporation
MDA Space

Catalyzers

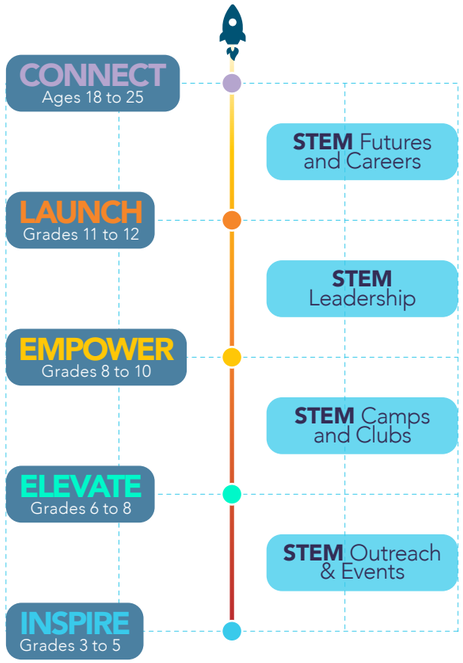
S.M. Blair Foundation
J.W. McConnell Family Foundation
Youth Philanthropy Initiative Canada
The Gairdner Foundation
The Give Foundation
Kepler Communications

Looking Ahead: **Our Bold Vision**

A new vision *for Science, Technology, Engineering and Math…*

We have **redeveloped** our programming model to facilitate STEM learning pathways by engaging and supporting youth at **critical stages of development.**

Our Plan: STEM Pathways



By 2025 we aim to:

Deepen our impact in **10** core communities

Increase our reach to **10,000** youth annually

Expand support to **5,000** classroom teachers

Expand support to **1,000** families and community members annually

We will do this while consistently advocating for systems that ensure equitable STEM education and opportunity for all. We see a world where ***all youth*** are empowered through STEM to be **leaders in their community, agents of change for society, and good stewards of the planet.**

Join us in building a ***new*** STEM future.
New cures. New solutions. New innovations.

Support at vosnl.org/donate or contact donate@vosnl.org to learn more.

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