

2022-23 Partnership Report to the CFUW - Owen Sound

We appreciate your Continued Support of STEM Programming in Owen Sound!

Thank you for your ongoing support of our of classroom workshop program in Owen Sound in the 2022-23 school year. With your donation of \$1.500 we were able to:

- Provide 5 complimentary virtual classroom workshops to one school serving a lower income community in Owen Sound between February and March 2023.
- Transform 120 children into scientists, heightening their interest and confidence in STEM through topics such "As a Matter of Fact..." (Grade 5, 1 workshop), "Finding Solutions!" (Grade 6/7, 1 workshop), "Genetic Diversity and You!" (Grade 6/7 and 8, 2 workshops) and "Sounds Like Science" (Grade 4, 1 workshop), as they investigated subjects such as; the properties of matter, the particle theory and concentration and rates of dissolving, genetics, including chromosomes, mutations and heredity and the properties of sound, including pitch and volume.
- Provide 5 teachers with additional STEM resources that will benefit not only their current classes, but those in years to come.

We are truly grateful that you are working with us to ensure that children and youth have inclusive opportunities to develop science and math literacy, get excited about STEM, and see themselves as tomorrow's scientists and engineers. Representing all voices in our workforce, communities, research and scientific discoveries empowers the youth of Canada to help build strong and healthy communities.

Our 2022-23 Workshop Outcomes (to date) in Owen Sound

Although we have not yet returned to pre-COVID booking numbers in our traditional service areas, we continued to provide rich and engaging virtual experiences to thousands of children and youth.

38

Virtual STEM workshop topics available

1,000

Children and youth inspired through virtual workshops

45

Virtual classroom and community setting workshops delivered/scheduled to take place

100%

of teachers said Scientists in School was very to extremely effective in encouraging students to make discoveries

91%

of teachers said Scientists in School provided them with new ideas to use in their classroom

91%

of teachers said Scientists in School was very to extremely effective in enhancing students' interest understanding of scientific principles

Our Mission

To ignite scientific curiosity in children so that they question intelligently; learn through discovery; connect scientific knowledge to their world; are excited about science, technology, engineering and math (STEM); and have their interest in careers in those fields piqued.

Our Vision

We want all children in Canada to be actively engaged in the seeing, doing and understanding of science. Our next generation deserves the opportunity to view science and technology as fun, relevant and something that every one of us — even the smallest — can participate in here and now.



Preparing Children and Youth for the Challenges Ahead

With 50 to 70% of future jobs predicted to be in STEM-related occupations, Canada requires young workers with an aptitude for science, technology, skilled-trades and entrepreneurship. To achieve this, the Council of Canadian Academies recommended, in 2015, that the quality and level of fundamental STEM skills be increased, beginning in the early years.

As a leading science education charity, Scientists in School helps by sparking a passion for STEM in children and youth through high quality, workshops, well-trained and passionate role models, and real-world inquiry that develops 21st century work-place skills including critical thinking, problem solving, and teamwork.

Our Lasting Impact

University-led longitudinal research has confirmed that the effect of our workshops lasts long after children leave elementary school. In open-ended survey questions and interviews, 306 grade 11 and 12 students easily remembered activities in various workshop topics in their grade 6, 7 and 8 classrooms. This study focused on students from high-needs schools, and demonstrated the lasting difference that our innovative classroom workshops create for youth STEM success.

With our help, today's scientists in school, guided by visiting STEM professionals, can become the leaders and innovators we need for tomorrow.



Reimagining, Reengineering and Recovery

For over 33 years, Scientists in School has nurtured the curiosity of children through our high-quality, experiential workshops. Pre-COVID, we reached over 700,000 elementary-aged children a year through in-person classroom and community workshops in Southern Ontario and Alberta. In fall 2019, we inspired our 10 millionth young scientist!

Then, in March 2020, the pandemic brought the world – and Scientists in School's workshops – to a halt. Since then we have been on a journey of reinvention and recovery. Our journey is far from over and, like many charitable organizations, we continue to look for ways to adapt to pandemic-induced changes for both program delivery and fundraising.

Our virtual workshop delivery model has been very well received by children, teachers, parents and community organizations alike. Feedback from our post-workshop surveys tells us that the excitement of discovery takes hold as soon as the individually packaged mini science bags are opened. Our expert scientist-presenters engage children with a variety of learning styles, and even the most reticent happily share their observations.

To see the workshops available to teachers in Ontario, <u>click here</u>. Want to see a virtual workshop in action? We have a video <u>right here</u>.

Over the last two+ years, our team has:

- Developed 38 high-quality, engaging STEM workshops 30 classroom 8, community
- Retrained over 100 in-person presenters to deliver virtual workshops
- Converted our office space to a socially distanced packing operation
- Packed and shipped over 400,000 mini science bags across 10 provinces (and a school in the Caribbean!)
- Developed free STEM resources to support learning and inspire young minds: interviews
 with STEM professionals, virtual field trips such as the Winter Wonderland Nature Walk
 and Wild Wetlands, and fun, hands-on activities to help educators and parents bring
 science into schools, homes, parks and backyards

Our workshops have reached almost every corner of Canada – island schools accessible only by ferry, Indigenous communities, and public, private, Catholic and Francophone schools in every province. We virtually engaged over 230,000 children and youth through 1,759 schools and community groups in over 460 communities across 10 provinces.

In addition to growing our reach geographically, we have also made strong strides towards our strategic goal of proportional distribution of workshops between high and lower-income communities. In 2021-22, with tremendous donor support, we were able to offer more than 2,500 free STEM enrichment workshops to schools and community groups. Through these workshops, we reached over 60,000 children and youth who might not otherwise have had this hands-on enrichment opportunity.

We are incredibly proud of what we have achieved over the last two years, and optimistic about the coming year!

Now well into the 2022-23 school year, we are excited to have relaunched in-person workshops in select areas. We have re-imagined our in-person workshops from the ground up – but with the benefit of 33 years experience – and replenished our in-person presenter materials and toolkits. With a dual stream of in-person and virtual workshops, and a national reach, we will move ever-closer to our vision of engaging every child in Canada in the seeing, doing and understanding of science.

Thank you again for helping us to bring experiential STEM learning opportunities to students in Owen Sound, helping to ensure that as many children as possible in the city have the opportunity to gain vital 21st Century learning skills.

Our Impact Across Canada in 2021-22

Although we did not reach 700,000 children and youth, as we did pre-COVID, we are thrilled to have built upon last year's successes and engaged over 235,000 children in rich, hands-on virtual experiences – an almost 30% increase. As we come to terms with new realities, we look forward to reaching more children and youth than ever before through both inperson and virtual experiences.

235,000

Children and youth inspired through virtual workshops

10,400

Virtual classroom and community setting workshops delivered

9,000

Teachers mentored and provided with post-workshop extension activities

1,200

Schools full of eager young scientists

460

Communities across Canada

38

Virtual STEM workshop topics across Canada

11,000,000

Face time minutes of investigation

10,000,000

Young scientists inspired over 33 years

Follow us for Exciting Updates!









What Teachers in Owen Sound are saying about our Virtual Classroom Workshop Program

"The Scientists in School program is fantastic for Kindergarten children. Our presenter was very organized with materials for the children and clear in her step-by-step instructions about what we were doing. I highly recommend this workshop for children in Kindergarten to explore gravity and things that move."

+ Kindergarten Teacher after an On the Move! workshop

"I would recommend a Scientists in School workshop to any teacher. The presenters are very patient and very knowledgeable. In one hour, we learned so much, and students were really excited and engaged! After the workshop, I received a resource package containing background information about the science covered and providing additional activities for my students. Thank you!" + Grade 4 Teacher after a CFUW Owen Sound-donated Sounds like Science! workshop

"My class had a virtual workshop. All the materials needed for the workshop came ahead of time, and every student received his/her own little kit. Our presenter was so engaging and knowledgeable. Students had no problem following her instructions. They were fully engaged for the whole hour the workshop lasted, and even after it ended, they continued exploring on their own.

Thank you!"

+ Grade 4 Teacher after a Get it in Gear! workshop

"The Scientists in School program offers an excellent way for students (and teachers) to learn scientific concepts that are not always easy to communicate/teach to students. The hands-on aspects are always on point and help students grasp the concepts. Thank you"

+ Grade 6/7 Teacher after a **CFUW Owen Sound-donated** *Genetic Diversity and You!* workshop

Equity is Important at Scientists in School

Our vision speaks to every child in Canada being actively engaged in the seeing, doing and understanding of science, regardless of race, gender, socioeconomic status or performance in school. Experience and research show us that innovative education efforts are critically needed to close opportunity and achievement gaps between youth in poverty and their more affluent peers.

Low Income: 62,000 students inspired through life-shaping opportunities.

Francophone: 6,600 students participated in French language workshops.

Rural: 6,500 students, with exponential growth in Newfoundland & Labrador.

Indigenous: Thousands of Indigenous students across Canada.

We have made a concerted effort to increase our reach to children and youth in underserved communities. This year, we distributed 2,500 complimentary classroom and community workshops, more than ever before. Thanks to our donors, close to 60,000 children became scientists in school who may otherwise not have had the opportunity.