

Let's Talk Science: Innovating through Disruption

In the face of COVID-19, Let's Talk Science adapted and responded quickly to new realities. Guided by our commitment to innovation, equity and collaboration, we stepped up to support Early Years - Grade 12 / CEGEP educators, youth and families, while maintaining our efforts to catalyze systems change in STEM education. **During the period of school closure, over 190,000 Canadians accessed Let's Talk Science's website to support learning at home.** Additionally, other forms of engagement are described below.

The pandemic underscored the critical need for our work as science and STEM skills underpin the global response. The rapid pace of change and transformative impact of technology point to the importance of ensuring youth are scientifically literate and develop critical thinking, problem-solving and evidence-based decision-making skills. Let's Talk Science appreciates the ongoing support of our partners, which enabled us to innovate quickly and respond to the needs of learners. Here are some highlights.

We responded to youth, parent and caregiver needs by:

Launching STEM at Home

- ✓ offered parents and caregivers meaningful ways to keep kids exploring STEM with hands-on activities and resources with themes like [Exploring Space](#), [Canada Innovates](#) and [Careers](#)
- ✓ launched a new weekly newsletter for caregivers, acquiring over 900 subscribers
- ✓ STEM at Home was promoted and shared by more than 50 education partners including six provincial/territorial governments, 21 school boards, four teachers' associations, and over 20 community and post-secondary partners

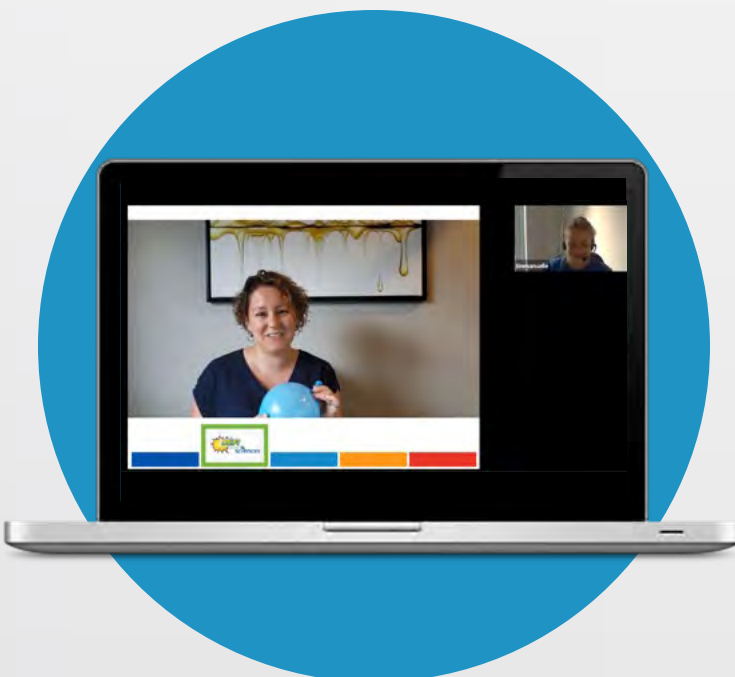
letstalkscience.ca/educational-resources/stem-home



Moving the Let's Talk Science Challenge Online

- ✓ worked quickly to transition our 27 (24 Eng, 3 Fr) in-person competitions into an 8-week series of online events and engineering design challenges for students in Grades 5-8.
 - every week 400-550 youth participated in the Challenge
 - attracted participation from students in regions underserved by in-person events
 - responding to demand, evolved the Challenge into a summer series, [Brain Busters](#)

letstalkscience.ca/events/challenge-online





Creating New Career Contests

- ✓ created two new opportunities for Canadian youth to think about their futures and compete for prizes
 - expanded the [Let's Talk Careers: Canada's Most Informed School Competition](#) in partnership with ChatterHigh by adding an individual prize stream
 - ✦ over 2,500 Canadian youth from 200 schools across Canada (cumulatively) correctly answered 112,633 questions about careers
 - ✦ more than 100 students earned small cash bursaries by correctly answering at least 200 questions each!
 - ran [That's a Real Job! Contest](#), challenging Grades 5-12 students to propose a likely "future career" concept for use in a national campaign
 - ✦ over 100 youth from across Canada submitted entries (winning entry from Grade 5 student for AI Ethical Counsellor)
 - ✦ over 2 million views to completion of promotional video showcasing our existing career content

Expanding Partnerships

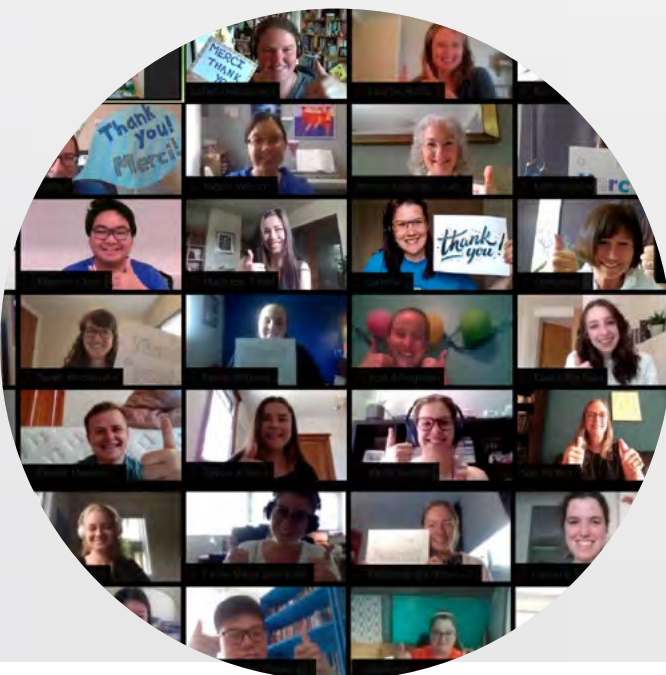
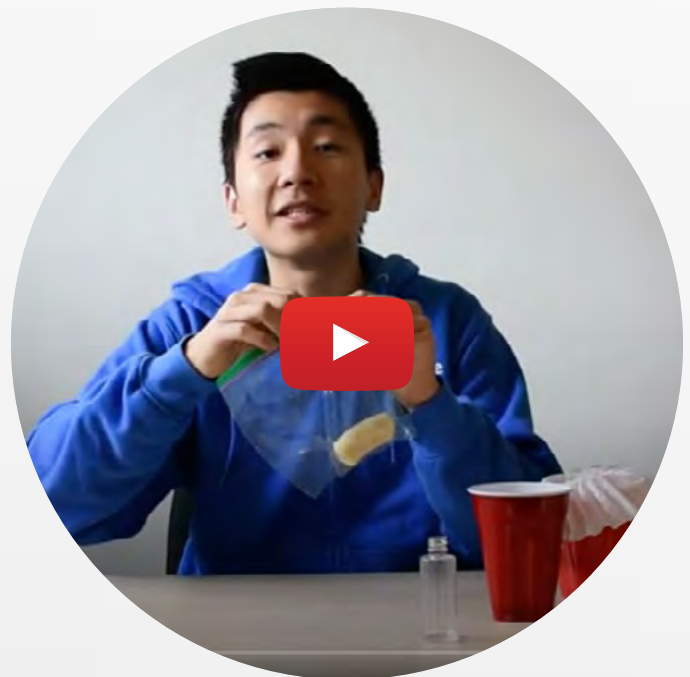
- ✓ supported the expansion of [The Solutioneers](#) series that inspires girls in coding and STEM (produced by Shaftesbury) to include a suite of complementary videos, [Future Minds](#), showcasing real youth doing scientific research and [MakerSpace](#), to support doing robotics at home
- ✓ teamed up with [Exploring By The Seat of Your Pants](#) to showcase video field trips, [Tech Bandits](#) to dive into makerspace technology, and [STEAM Sisters](#) to showcase the relevance of science



We engaged and supported volunteers by:

Creating Virtual Outreach Opportunities for Volunteers and Youth

- ✓ At least 12 Let's Talk Science Outreach sites tested new ways to engage youth online. For example:
 - Let's Talk Science Outreach at the University of Toronto and the Canadian Cancer Society hosted the 5th annual Let's Talk Cancer event in a 2 day online format for the first time, engaging over 200 students
 - Let's Talk Science Outreach at Lakehead offered weekly online environmental science programming for high school students
- ✓ Let's Talk Science summer student staff are now creating [new, engaging online content](#) for use by our Outreach sites in the Fall and we are examining how to scale effective local pilots



Moving the National Training Conference for Outreach Coordinators Online

- ✓ acted quickly to move the national conference online for over 150 volunteer leaders, resulting in the largest multi-day training event in the Outreach program's history

We responded to educator needs by:

Transforming Educator Practise Through Online Training

- ✓ responding to need and demand, shifted quickly to provide 53 online professional learning workshops on building digital skills and using tech effectively to support student learning
 - more than 1,280 educators completed professional learning workshops (often several workshops); and enrolled in professional learning communities (estimated student reach of over 32,000 youth)
- ✓ 67 educators continued participating in our ongoing Coding and Robotics pilot project
- ✓ 41 educators, including 6 from Indigenous schools, were named Let's Talk Science Teacher Leaders and began training



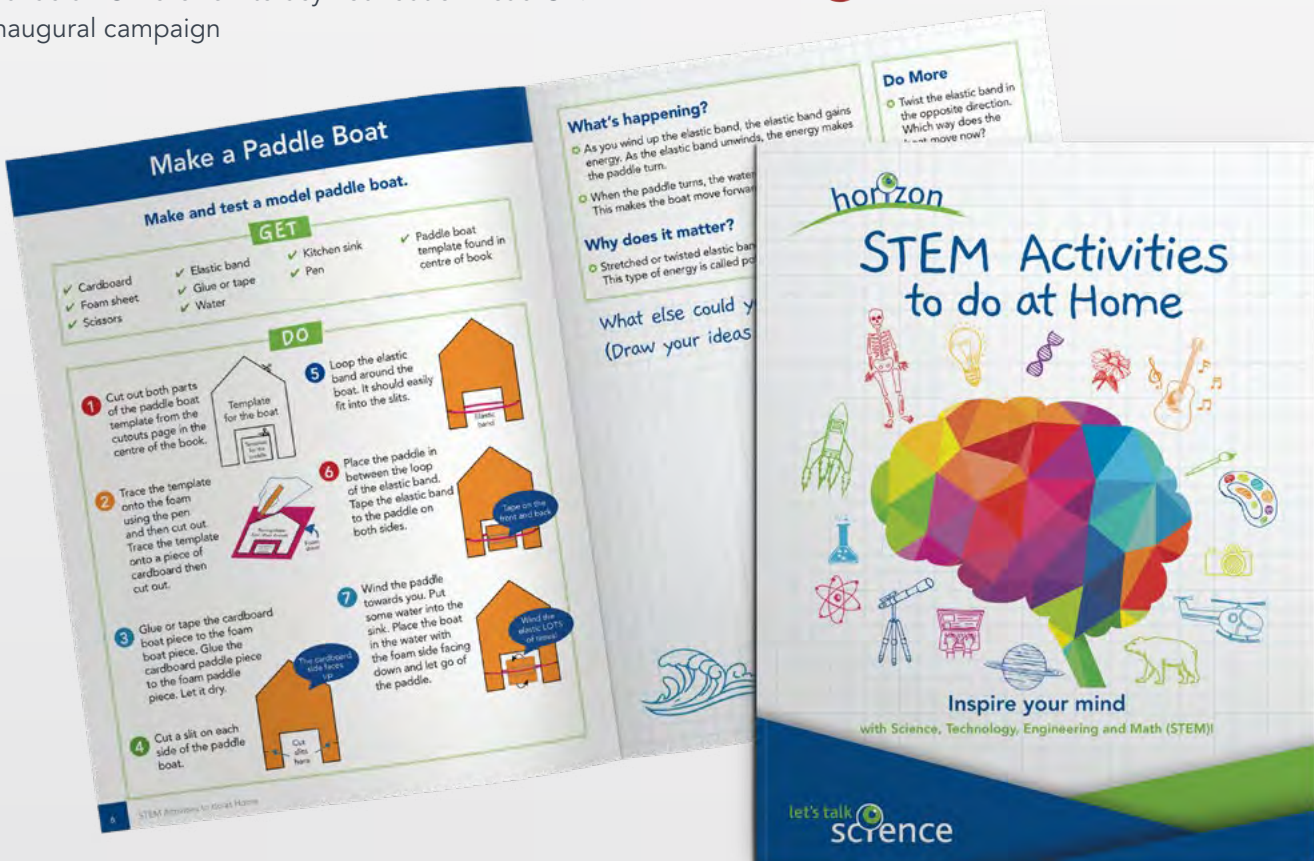
We maintained our leadership role by:

Bridging the Equity Gap with the Horizon Project

- ✓ led a network of partners to create the [Horizon Project](#) and provide Grades 4-6 youth in low socio-economic communities with a robust package of learning resources that support hands-on exploration, science inquiry and reading - without the need for devices and internet
- ✓ 75,000 Horizon Project kits will be/have been delivered to over 120 food banks and community organizations across Canada for distribution to children; of these, more than 8,000 kits will be given to Indigenous youth.
- ✓ This project paved the way to Let's Talk Science becoming the only STEM organization supporting the Canadian Children's Literacy Foundation Read On! inaugural campaign



- Food Banks Canada distribution
- ★ Outreach partner site distribution



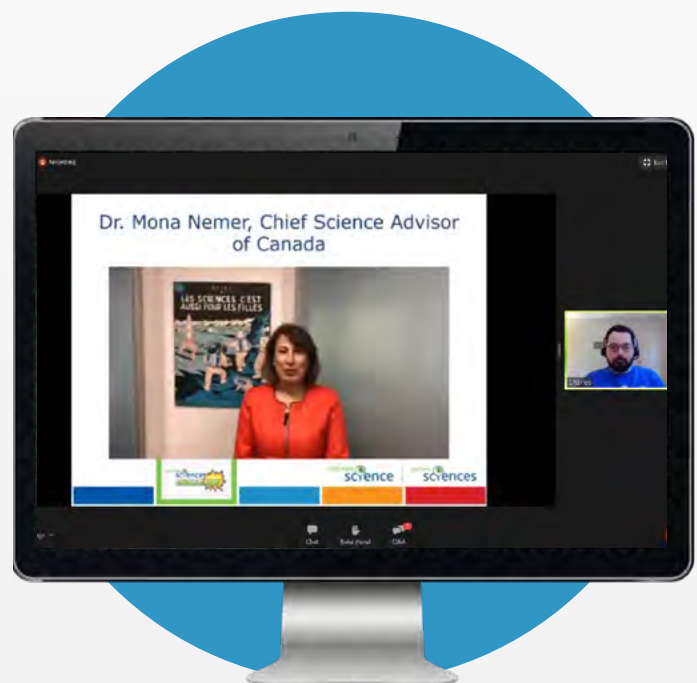
We maintained our leadership role by:

Addressing Issues of Equity, Diversity and Inclusion (EDI)

- ✓ issued a [formal statement](#) underlining our belief that education is critical to addressing racial and other barriers that keep many youth from reaching their full potential
- ✓ followed up with an [overview](#) of the organization's EDI work
- ✓ surveyed staff and lead volunteers about EDI, held two facilitated discussions about racism with staff and outreach coordinators, planned a new equity reporting section of our website, and established a Task Force on Race that will report in December

Innovating Climate Education

- ✓ continued designing a large-scale 'citizen science' action project about climate change to pilot in late 2020. Using human-centred design principles, the climate project will engage youth in evidence-based decision making and action
- ✓ established partnership with the Royal Society of Canada to engage climate experts in STEM and the humanities in support of a broad approach to science-based climate education



Engaging partners

- ✓ Dr. Mona Nemer shared a special message in both [English](#) and [French](#) about the importance of science literacy. The video was shared during our Let's Talk Science Challenge Online, on our website and through social media.
- ✓ Over 180 organizations contributed to the success of the Horizon Project, from development and distribution to financial partners.
- ✓ the Canadian Space Agency contributed mementos to Horizon packages and former Canadian Astronaut, Chris Hadfield, included an inspirational message



Supporting Education Systems Change and Contributing to Community

- ✓ Let's Talk Science maintained its long-standing commitment to supporting systems change in education and actively contributed to the scientific and education communities through the pandemic. **For example, our President, Dr. Bonnie Schmidt:**
 - ✦ joined the Genome Canada Board of Directors in June
 - ✦ is an active member of the Federal Government's AI Public Awareness Working Group
 - ✦ is a member of the PISA Expert Strategic Visioning Group to the OECD which developed a transformative vision for the international test administered to students in over 80 countries, considered a bellwether for science education ([PISA Strategic Experts Group Proposal](#))
- ✦ is a founding member of Canadian Coalition for @Home Learning, which launched in April
- ✦ presented the opening keynote address at an international science conference in June and was invited to keynote another in the Fall
- ✦ joined a Scholar's Choice webinar to discuss the importance of early STEM learning with over 2,200 Early Years and Kindergarten educators
- ✦ invited to keynote at an international conference hosted by the National Academy of Sciences of Argentina to help them design an equity in STEM education program