



BUILDING THE NEXT GENERATION OF LEADERS

“4-H CANADA’S VISION IS TO BUILD AND SUPPORT THRIVING COMMUNITIES IN PARTNERSHIP WITH YOUTH LEADERS,” SAYS CEO SHANNON BENNER. SHE EXPLAINS WHY THE ORGANISATION’S STEM PROGRAMMES ARE AN IMPORTANT PART OF THIS VISION THAT AIMS TO EMPOWER A GENERATION TO AFFECT POSITIVE CHANGE

SHANNON BENNER

CEO of 4-H Canada



“4-H Canada is one of the most well-respected youth-serving organisations in Canada, delivering world-class, positive youth development programming in the areas relevant to today’s youth. Through the delivery of national programmes and initiatives, and in close collaboration with our 12 provincial 4-H associations, we work to fulfill our mission to empower youth to be responsible, caring and contributing leaders that affect positive change in the world around them.”

The four Hs represent core values:
HEAD: managing, thinking
HEART: relating, caring
HANDS: giving, working
HEALTH: being, living

<https://4-h-canada.ca/>

THE OVERARCHING GOAL OF 4-H CANADA IS TO HELP YOUNG CANADIANS TO “LEARN TO DO BY DOING”. CAN YOU EXPLAIN ITS COMMITMENT TO STEM EDUCATION?

4-H Canada is committed to building capacity around science, technology, engineering and mathematics (STEM) for 4-H youth and leaders across Canada.

Eighty-three percent of 4-H members live on a farm or in a rural community, where STEM plays a critical role in developing innovations and efficiencies in agricultural production and enhancements to the delivery of infrastructure, while advancing environmental sustainability practices.

As a trusted leader in positive youth development in rural communities for more than 100 years, 4-H Canada understands the challenges of young people in rural Canada and is uniquely positioned to address their needs. We support youth in building their confidence to explore future career opportunities, and to offer solutions to global challenges in various sectors by providing non-school-based STEM programming.

Through the programmes in the Science & Technology Leadership Development Pillar, youth can dive into hands-on, inquiry-based projects and activities that engage them in science and spark their curiosity. In



collaboration with local 4-H clubs, provincial organisations, partners and the national office, 4-H Canada ensures all youth have access to resources and opportunities in science.

4-H CANADA'S PROGRAMMES ARE DIVIDED INTO FOUR LEADERSHIP DEVELOPMENT PILLARS. WHAT IS A LEADERSHIP DEVELOPMENT PILLAR, EXACTLY?

Providing strong and relevant national, provincial and local programmes through four Leadership Development Pillars and experiential learning opportunities is 4-H Canada's formula in developing responsible, caring and contributing youth leaders. The four Pillars are:

Community Engagement & Communications

Through programmes such as Citizenship Congress, Club to Club Exchanges or Hands to Larger Service, 4-H youth develop concrete skills to become capable, confident and contributing citizens. Youth members engage in community action, leadership, personal development, communication and expressive arts.

Science & Technology

Engaging young people in hands-on science and technology-based projects and activities is the focus of this Pillar, which encourages 4-H'ers to work together as catalysts for change and drivers of innovation in science and technology. Young 4-H scientists are not only vital in solving sustainable growing and environmental challenges, they are also

critical in addressing the agricultural employment gap, as they help drive advancements in technology and automation. (See 'Two examples of 4-H Canada's STEM activities that help youth to learn by doing'.)

Environment & Healthy Living

Programmes such as Members Forum, Careers on the Grow or Find Your 4-H Wings provide hands-on opportunities for youth to become stewards of the environment and develop sustainable solutions. Youth find strategies to strengthen their own health and wellbeing, take care of others and appreciate their surroundings.

Find Your 4-H Wings

Find Your 4-H Wings is a campaign that encourages 4-H members across Canada to discover the fascinating world of birds, bats and their habitats.

Sustainable Agriculture & Food Security

This Pillar is essential to the sustainable growth of our planet, and to the food we eat and produce. Programmes such as Going Global Exchanges, Proud to Bee a 4-H'er and Steeped in Soil allow youth to respond to our global challenges, unleash their passion for knowledge, and make the world a better place.

Steeped in Soil

Through fun, hands-on activities, 4-H'ers discover the importance of healthy soils and learn about the Canadian agriculture sector. Collected



data from their experiment will be shared as part of a global citizen science database that will help build a better picture of soil health around the world.

Proud to Bee a 4-H'er

This popular initiative provides 4-H'ers with the opportunity to plant, grow and tend a pollinator-friendly garden, while learning about the vital role that pollinators play in creating a healthy ecosystem and a sustainable food supply.

THE EDUCATIONAL KITS SUCH AS STEEPED IN SOIL, PROUD TO BEE A 4-H'ER AND FIND YOUR 4-H WINGS ALL RELATE TO STEM IN ONE WAY OR ANOTHER. WHY ARE THEY SEPARATE FROM THE SCIENCE & TECHNOLOGY PILLAR?

Although it can be argued that Steeped in Soil and Proud to Bee a 4-H'er relate to science, these initiatives mainly aim to build 4-H'ers' awareness of best practices in agriculture, though learning about soil health and the importance of pollinators.

Again, although Find Your 4-H Wings touches on science, this initiative aims to encourage youth to be good stewards of their environment.

TO WHAT EXTENT DOES 4-H CANADA WORK WITH THE GLOBAL 4-H NETWORK?

Established in 2014, the Global 4-H Network believes the power to build a more sustainable future lies with today's youth. Every three years, the Global 4-H Network Summit brings members, leaders and professionals together to network and share best practices to strengthen the 4-H movement, which in turn, strengthens our communities, helps feed our growing world and nourish our growing minds. The resources, projects, activities and best practices are shared via the 4-H LEARNS (Learn. Educate. Access. Resources. Network. Support) website.

FINALLY, WE SEEMINGLY LIVE IN UNCERTAIN TIMES. WHAT IS 4-H CANADA'S HOPE FOR YOUTH IN THE FUTURE?

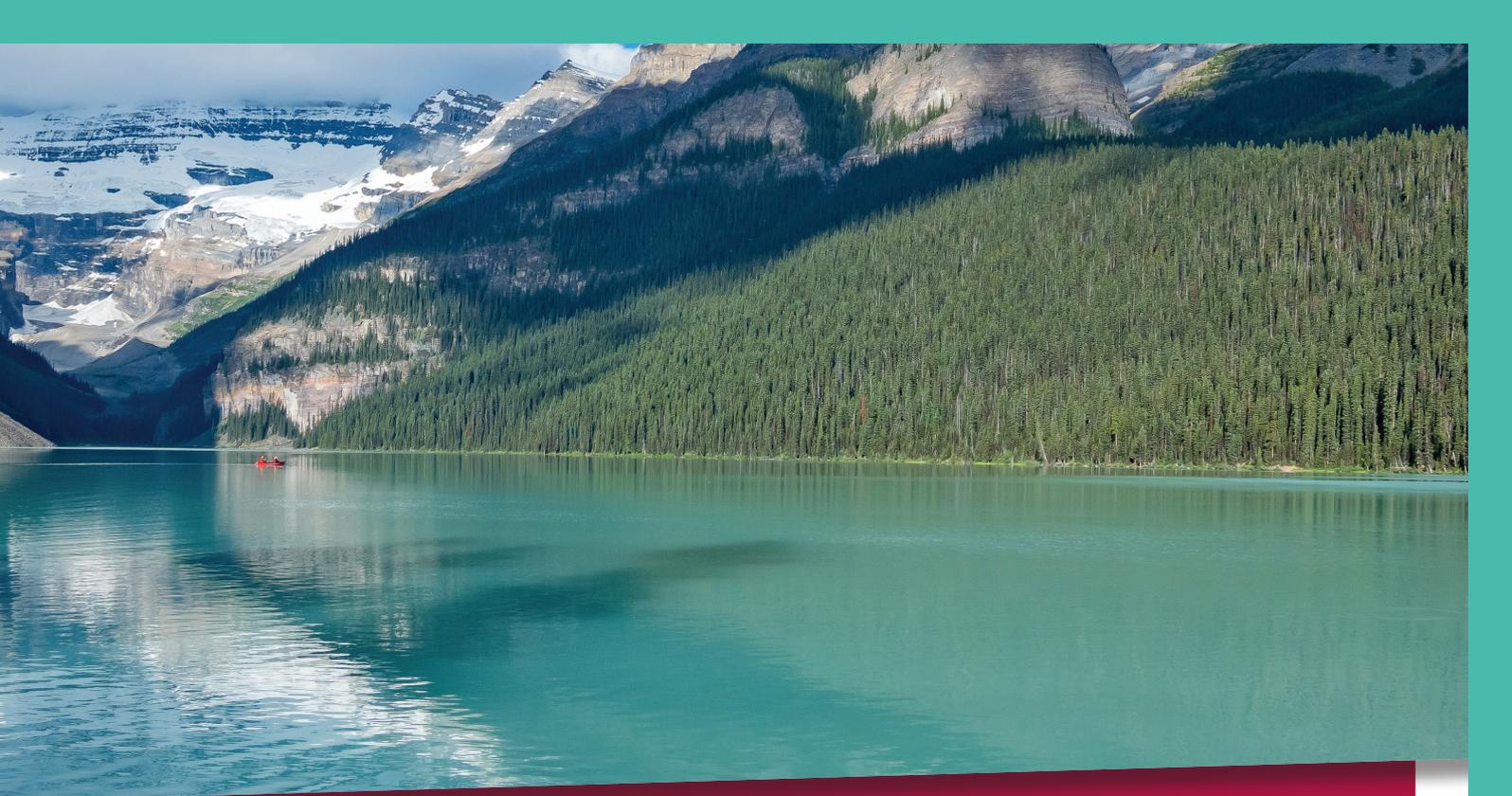
4-H Canada's vision is to build and support thriving communities in partnership with youth leaders. By empowering our youth to practise their leadership skills within their clubs and communities through hands-on activities, we are helping to build the next generation of leaders who will affect positive change in the world around them.



4-H'ers who compete in the 4-H Canada Science Fair develop, complete and present a science project.



4-H'ers are engaging in STEM through hands-on learning



TWO EXAMPLES OF 4-H CANADA'S STEM ACTIVITIES THAT HELP YOUTH TO LEARN BY DOING

4-H CANADA SCIENCE FAIR

Offered in partnership with our founding Science & Technology Leadership Development Pillar partner Bayer, along with Agriculture and Agri-Food Canada (AAFC), this programme offers 4-H members in grades 7-12, or in CEGEP, across Canada the opportunity to develop, complete and present a science project.

As part of the in-person round of the Science Fair in 2019, 16 talented 4-H members showcased their projects, ranging from UV light affecting plant growth, bovine pneumonia, flax waste as an energy supply, and seaweed as an antifungal application.

The five 4-H Canada Science Fair winners went on to represent the 4-H community at the Canada-Wide Science Fair (CWSF) in Fredericton, New Brunswick, where they competed with 500 other bright young minds from across Canada for top prizes and nearly \$1,000,000 in scholarships.

The 2020 4-H Canada Science Fair will take place at the University of Saskatchewan College of Agriculture and Bioresources in Saskatoon, Saskatchewan from March 4-8, and registration is currently open. The 2020 Canada-Wide Science Fair is happening in Edmonton, Alberta from May 9-15, 2020. For more information, visit: 4-h-canada.ca/sciencefair.

Benefits for Grade 7-12 students

4-H members living in rural communities in Canada do not always have access to opportunities in STEM. The 4-H Canada Science Fair is a unique way for them to showcase their talent within 4-H and to potentially advance to the Canada-Wide Science Fair.

DISCOVER SCIENCE

4-H Canada launched the Discover Science club outreach initiative in 2019, supported by Bayer and the Natural Sciences and Engineering Research Council of Canada (NSERC), inviting 4-H members to take part in a science experiment "in a box".

With the support of the National 4-H Council in the US, and building on their 4-H National Youth Science Day efforts, 4-H Canada was able to offer Discover Science as an exciting and engaging STEM-focused initiative available to clubs and members across the country – sparking science and cultivating curiosity.

For the first year of this initiative, club members learned how to design and build their own wearable health monitor. Following the step-by-step engineering and design process, they engaged in hands-on learning about human health, and how it can be tracked and improved using technology.

In 2020, Discover Science is focusing on computer science to show youth how they can use code, both as a form of personal expression and as a lens to understand the world around them. The 2020 Discover Science kits contain the Code Your World STEM challenge materials from the National 4-H Council in the US. For more information, visit: 4-h-canada.ca/discover-science.

Who can access the 4-H Canada Discover Science kits?

The kits are available to 4-H members in Canada.