Green Bricks Education Society
Annual Report
2021-22

A Message from Co-Executive Directors

Diana Klein and Fiona Zawadzki

THANK YOU to our board, membership, clients and funders for supporting Green Bricks Education Society for the past 2021-22 school year. With your support we have been able to engage over 8500 grade K-12 students throughout B.C. in understanding the importance and benefits of environmental science through the lens of our built environment in their lives, schools, communities, and globally.

Green Bricks Programs

This school year **2021-22** we delivered to 340 classrooms reaching over 8500 students with our live, interactive online programs. For all programs we developed pre and post activities to encourage critical thinking and actions for students beyond the program delivery. We reached students throughout B.C. including Lower Mainland (Anmore, Squamish, Burnaby, Tri-cities, Delta, Langley, Maple Ridge, New Westminster, North Vancouver, Pitt Meadows, Richmond, Surrey, Vancouver, and West Vancouver), Abbotsford/Mission and Fraser Valley, Vancouver Island, Haida Gwaii, Okanagan, Sunshine Coast and Prince George.

We developed and delivered to B.C. classrooms the following workshops this year:

Green Bricks Secondary Blocks: Secondary

This interactive and curriculum-connected workshop addresses the issues around our access and relationship with water, transport and energy (both locally and globally) and further explores new and emerging careers in the green economy. We consider topics that include where our tap water comes from, how we filter and clean it, and ways to conserve water through innovative solutions in our built environment. We explore energy use and conservation considering renewable and non-renewable energy, choices on transportation and smart energy solutions for our future.

Exploring our Stuff: Elementary and Secondary

Our circular economy virtual workshop is an interactive program that engages students in looking at our 'stuff' in terms of what resources are used and wasted. Through engaging activities, we task students to consider our volume of clothes, games and equipment in their lives by exploring resources, energy, water, greenhouse gas emissions, and social impacts in our product life cycles. We discover circular economy design in both nutrient and technology cycles instead of products designed from cradle to grave using current examples like fast fashion and microplastics. We also explore our over consumption of food, food waste and the social inequities resulting here and in the global economy. This program is designed to challenge students through enquiry-based learning to consider changes we can all make.

Energize: Elementary

This workshop explores the significant impact energy conservation can have on our community, its citizens, and the environment, both locally and globally. Students learn about our community-wide climate action targets, sustainable transportation alternatives and building energy efficiency initiatives through interactive activities. This workshop further explores what is in the air we breathe, regional characteristics of our air sheds, and engages students in solutions that work for our community.

Science of Water: Elementary

Access to clean drinking water affects us all! Via a virtual presenter, this interactive online workshop engages students to understand the importance of water in our lives and how we can manage water sustainably into the future. We explore our local water sources; water conservation and the importance of water in our lives; global access to water; and how LUCKY we are to have the water coming out of our taps!

Air Quality and Biodiversity: Elementary

Clean air contributes to healthy people, productive crops, thriving ecosystems, and the essential biodiversity on our planet. Via our online workshop, students participate in engaging hands-on activities to understand the science behind human activity and air quality. We explore topics like how ground level ozone and particulate matter is produced, airsheds and how they affect the air quality, the effects of poor air quality on our health, flora and fauna, and the actions we can take to keep our air clean.

Celebrate Drinking Water Week (May 2-7) with a kit of water fun!: **Elementary**

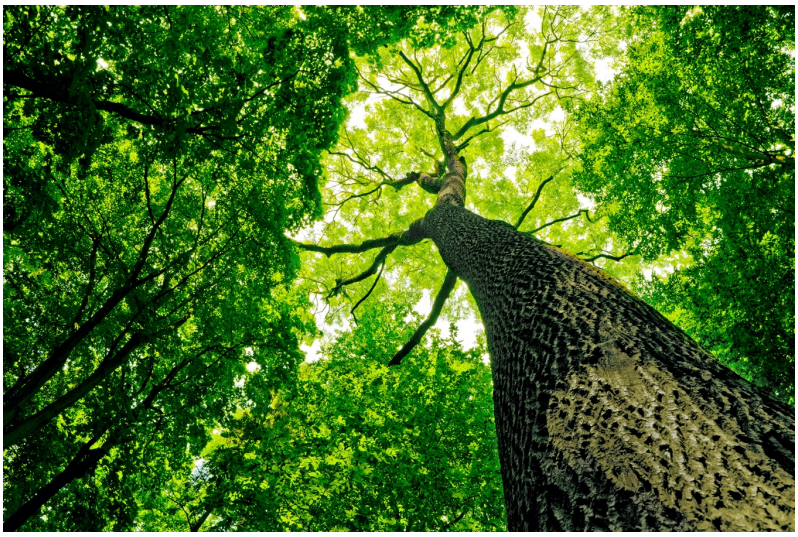
During Drinking Water Week, Green Bricks and Abbotsford Mission Water and Sewer Services typically offer a unique interactive Water Week event at Abbotsford Centre. This year our facilitators took water week into the classroom, arriving with a kit of supplies like craft supplies, game pieces and outside fun items to use during this special event. The students had fun with all the water stations where they explored water in our community, understood how fortunate we are to have our amazing tap water, and went outside to play a water cycle game, bringing **Drinking Water Week** alive in classrooms!

Aqualibrium Competition

This year we ran multiple locations of the Aqualibrium competition, in Abbotsford and Mission for water week. Students learnt about water supply, what civil engineers do and the importance of protecting our water resources. The aim of the competition was to distribute three litres of water equally between three reservoirs (containers) placed randomly on a grid of 16 points. The students deliberated and calculated as they built their water systems, which were then tested to see which group had the best solution!

<u>Testimonials</u> …from the teachers

- *Ooo, I like the part about the career opportunities and the part about the water consumption.*
- *Gained so much new knowledge, many had never considered their water footprint.*
- *The visuals were great and the games made it fun and interactive.*
- *I loved How interactive it was, the students got to participate a ton!*
- *Students liked the interactive parts the best - drawing the water cycle, answering trivia questions and the game at the end (four square)*
- *The presenter had great enthusiasm and passion!*
- *I just love how Kathryn takes "charge". She knows kids so well and is not afraid to get into teaching mode. Kids love the trivia questions. They are space apart very nicely. I like the mountains we made and the water spraying on them really helped them to "get it".*
- *Gained so much new knowledge, many had never considered their water footprint*
- *Made us THINK again about environmental issues, that were perhaps, being over-shadowed by COVID.*



Green Collar Futures

What do YOU want to BE when you finish school?

Our 9th Annual Green Collar Career Conference called Futures this year was held online and was offered free to students in grades 9-12 throughout B.C. giving them this exciting opportunity to connect with career mentors in sustainably related careers.

We had over 150 students register for this event and one of the benefits of the virtual platform was that we had students from all over B.C. attend. It was an inspiring day for both students and the career mentors and we have had great feedback from students who learned about possibilities in green careers and a chance to combine their passion with their future work.

Here are a few student comments (from a post event evaluation).

- *I think the speakers all had very interesting stories to tell and presented interesting information and insights into the green collar economy.*
- *I liked that everyone was being honest about their experiences and helping us learn more about different careers.*
- *The organization was amazing and I love the variety of jobs represented.*
- *I really loved the diversity of the careers and speakers that were presented in this conference, it was so inspiring to hear about all their different pathways to their occupations. I learned a lot more about green careers and this conference introduced a lot more options for my future job.*
- *I loved how organized and easily accessible each stream was. It was easy to follow and each session was quick but informative, which allowed opportunities for many speakers to join.*
- *The conference exposed me to a lot of unique and careers moving the world to become greener. The mentors shared great insight about how the specific careers can have a green impact and the steps to move towards the ideal "green future" for those careers. This conference opened doors, and also perspectives for me about how the careers we are going into have to adapt to the environment*

THANK YOU to all our sponsors

With your support we were able to reach over 8,500 students…

BC Community Gaming "We acknowledge the financial assistance of the Province of British Columbia"

Our Futures Conference 2022 donors:

Keynote and Scholarship Sponsors: Hamber Foundation, Retread Solutions, Kane Consulting, Rocky Point Engineering, Lithium Americas Corp, BTY Group, Prism Engineering Ltd.

Mentor Roundtable Sponsors: BC Building Science, South Street Development Group, GeoWest Engineering Ltd., GBL Architects, Iredale Architecture, John Holland, Integral Group and Green Bricks members.