Green Bricks Education Society
Annual Report
2020-21

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 2020-21 school year. With your support we have been able to engage over 12,000 grade 2-12 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 **2020-21** we delivered to 466 classrooms reaching over 12,000 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, 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.

Code Green: **Elementary**
Coding is present in many aspects of our life from something like the Internet of Things (IoT) where coding is used to enable Smart devices to 'talk' to each other and perhaps control the temperature in a room to Perseverance Rover's descent and touchdown on Mars. In this workshop students learn how the IoT can benefit society and individuals in fields like energy / resource conservation, improved efficiency and convenience, health and entertainment. Students learn simple coding using the Scratch coding platform which helps young people learn to think creatively,

reason systematically, and work collaboratively. Post workshop we challenge students to create a Scratch project to share their sustainability message.

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 3-7) 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. Last year this was offered virtually. Classrooms received a kit of supplies for the activities like craft supplies, game pieces and outside fun items to use during this special event. Then, we zoomed into the classroom virtually with fun water stations where students explore water in our community, understand how fortunate we are to have our amazing tap water, and head outside for the last station of this event to bring **Drinking Water Week** alive in classrooms!

Testimonials …from the teachers

It was interactive and the information was relevant to students' lives which kept them engaged.

I was very happy with the presentation. The pace was great, content was spot on. The activities and questions to engage the students were great.

Thank you for making the virtual work; t is so great for students to learn from experts. Us teachers have a lot of knowledge about many different things but it's great for them to hear from people who know a lot about a topic. I loved that we could still do this effectively with everything that is going on. Thank you!

We spent almost an hour and a half afterward talking about different things that came up from what we learned.

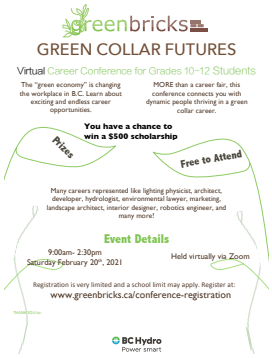
I could saw [see] them laughing, taking notes and participating, that's all that counts! I also received emails from their parents thanking "me"! ;)

There were many things that were great. I liked how the ideas presented always began with a connection to things the kids already know and/or have experienced and then led them to new ideas or ways of thinking from this familiar starting point. This happened several times. Also, there was a through line that connected all of it together (circular vs linear) I loved the surprising examples of completely compostable items, such as a replacement for Styrofoam made from corn husks and mushroom roots. I know that the kids will remember and talk about some of those more surprising facts. You covered a lot of ideas in a short amount of time, but it was all really well-explained. Ending with a fun BINGO game is such a great way to end it.

Green Collar Futures

What do YOU want to BE when you finish school?

Our 8th Annual Green Collar Career Conference called Futures this year was held online and was offered free to students in grades 10-12 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).

- *Loved the Keynote speakers! This event was an amazing opportunity to learn about careers I didn't even know existed. I'm glad I attended and hopefully can attend next year:)*
- *What I liked about the conference was being able to choose what presentations I attended and having the option between three presenters at a given time. I think that having multiple presenters with different occupations presenting at the same time allows for students to only view speakers and watch presentations they are interested in listening to.*
- *I loved the interactive nature of it and the positive environment it provided*
- *I liked how open all the guest speakers were and I also liked how they told us the kinds of pathways they took that lead them to their current job. It was very inspiring.*
- *I really liked the interaction with the presenters. We could ask questions or clarifications - it just felt more personal especially during this time of COVID.*

Photos by Brad Fedoruk

THANK YOU to all our sponsors

With your support we were able to reach over 12,000 students…

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

Our Futures Conference 2021 donors:

Hamber Foundation, Retread Solutions, Kane Consulting, BC Building Science, South Street Development Group, Geopacific, BubbleDeck Canada Ltd, Rocky Point Engineering, GBL Architects, Iredale Architecture, Lithium Americas Corp, NEXII, and Pinchin Ltd and all of our Green Bricks Members.