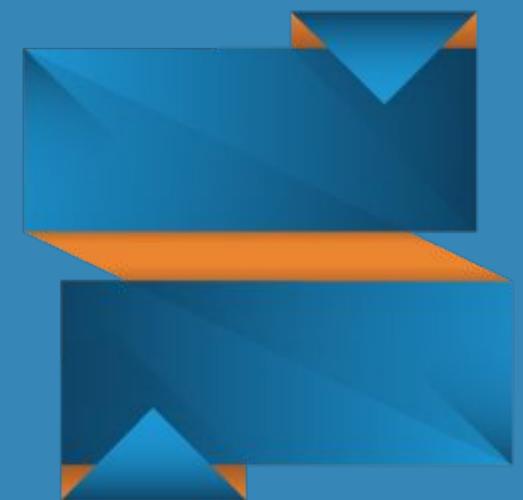


# STEAM Education Centres

Annual Report, 2020-2021

Empowering Students to Imagine,  
Design and Innovate the Future



# Education Innovation Happens Here

## Defying Odds, We're Full STEAM Ahead!

On behalf of the STEAM Education Centre Board, Staff and Students, it is a privilege to present to you our Annual Report for 2020-2021. This year, STEAM Education deepened its impact despite facing unprecedented adversity. Thanks to tremendous support and generosity from our network, we were able to quickly pivot to virtual program delivery in 2020, and add new programs to fuel curiosity and confidence in youth, building leadership and foundational skills in science, technology, engineering, art and math, contextualized to their communities and life experiences.



**The following pages detail the main programs that captured our mission driven focus, including:**

- ❖ iSTEAM - a participatory project with Chippewa of the Thames First Nation.
- ❖ STEAM Community Studio - a community engaged learning program prototyping new solutions to local problems.
- ❖ re//BUILD.IT Community - a computer donation program for students and low income families.
- ❖ STEAM Leaders - a learning, mentorship and leadership program for high school and post secondary students.
- ❖ Creating accessible educational Camps and Workshops for local learners - whether online or on paper.

As we look ahead to our fifth anniversary in October, we're incredibly grateful to our supporters for encouraging us to create advanced learning opportunities and introduce equity initiatives to reach underserved groups in our community. STEAM Education programs are creating meaningful, and long lasting impacts for students and community everyday. Thank you for supporting our mission and a vision for education innovation across Elgin - St. Thomas.

Sincerely,  
Jessica Gransauil  
Executive Director



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# iSTEAM

## Indigenous Ways of Knowing and STEAM Education

[iSTEAM](#) began in 2020 with Antler River Elementary School, Chippewa of the Thames First Nation as a participatory pilot project. iSTEAM explores our concept of incorporating Indigenous arts, culture, land and stories with hands-on projects using emerging technology and traditional hand tools to inspire digital skill development, educational achievement and personal growth. Each week of school, up to sixty students in grades 5-8 and 5 teachers participate in iSTEAM workshops using proprietary work plans and material kits. iSTEAM projects are interactive, FUN, culturally relevant to Indigenous people, and directly connected to the Ontario curriculum learning goals.

“During these maddening times, the STEAM projects were amazing because they gave students the opportunity to do hands-on activities, and even when we were teaching virtually, we were all able to work on the projects together; two of my students even started to teach me how to bead while we were online, and this fostered an environment of student-lead learning and community. I think that the biggest success of these kits within the context of a covid19 school year is that they helped bring students together.”

~ Ashley, Teacher at Antler River Elementary School

[Meet iSTEAM educator, Dakota, and learn more about iSTEAM with this short video!](#)

iSTEAM was generously supported by Canadian Internet Registration Authority and Ontario Trillium Foundation in 2020, and we aspire to grow iSTEAM to include additional schools and students including Standing Stone Elementary School, Oneida Nation.



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# STEAM Community Studio

## Students Creating Real Solutions

STEAM Community Studio is a community engaged learning program for students to design new solutions to real-world problems in their communities. Through research, design thinking and prototyping activities, students gain the exceptional ability to directly inform public policy discussions, support community members, municipalities, businesses, and organizations. In our first year, ninety-five students from 8 schools collaborated on 6 projects suggested by their community:

1. Creating a Community Reuse Centre for the City of St. Thomas.
2. Creating welcoming sensory spaces for Wellkin Child & Youth Mental Wellness Centre.
3. Creating a Virtual Marketplace for downtown businesses to build a stronger online presence with Downtown Development Board.
4. Creating an Audio and Video Production Studio for Youth Skill Building at Ignite Youth Centre.
5. Using live nesting cameras to inspire people to be stewards of the environment with Jaffa Environmental Centre.
6. Creating a multi-lingual 'Smoke Detectors for Seniors' public education campaign with the St. Thomas Fire Department.

This program was established with a visionary multi-year gift from the Estate of Donna Bushell within the Elgin - St. Thomas Community Foundation, and is set to kick off the the second year in September 2021.



**“STEAM Community Studio is an excellent example of a Community Engaged Learning (CEL) community partner. In the course, students have been able to take their classroom knowledge and apply it to real-world community problems. STEAM Studio has provided students with an exceptional experience and new perspectives on the impact of nonprofits in our community through a close collaboration with Denise and Fred (and others!). The St. Thomas Re-use centre is such an amazing idea and it will undoubtedly have significant positive societal and environmental impacts.”**

**Denise Grafton, PH. D Assistant Professor  
Department of Geography & Department of  
Health Studies  
Western University**



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# STEAM Leaders

## Fostering Learning and Leadership

STEAM Leaders is an advanced student placement and co-operative program for forward-thinking people who want to fortify their education and future pursuits. Each year, we welcome 12-15 high school and post secondary students into the program, who learn how to use our collection of technology and education tools, practice using prototyping tools, are mentored by industry experts, and have opportunities to lead younger students alongside the STEAM Education team.

From July 2020 to July 2021, despite the pandemic and restraints on learning, 16 students devoted more than 6200 hours to skill building, creating superlative content for future STEAM programs, fundraising for the organization and many other leadership activities across STEAM Education programs. With more interest in this program than ever before from students and schools, we anticipate expanding the program this year to include up to 20 student Leaders.



# re//BUILD.IT Community Computer Donation Program

re//BUILD.IT Community launched in July 2020 to support students, Indigenous communities and families with limited funds who lost access to a computer when their schools, centres and libraries closed due to the pandemic.

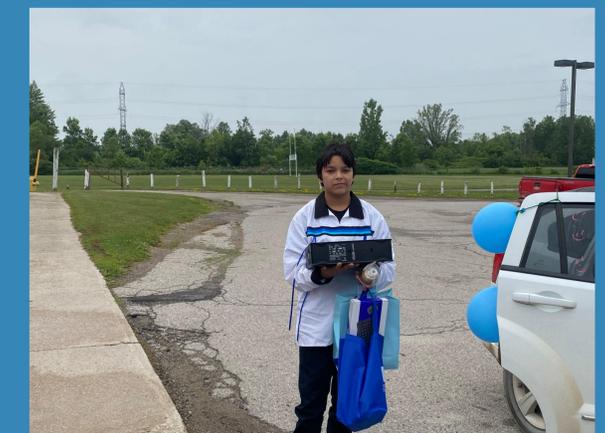
Selected by Future of Good as a Top 100 Recovery Project helping Canada build back better, re//BUILD.IT Community collects desktop and laptop computer donations from local businesses, organizations and people, to refurbish and donate the essential devices to vulnerable people living digitally stranded without a home computer.

To date, re//BUILD.IT Community has donated more than 235 computers to people who could not otherwise afford to acquire a device to communicate, learn, work, and function from home. Based on demand, we anticipate donating at least 300 computers in 2021.

“We strongly support this program and the focus on reducing disparities among barriered communities by keeping them connected and reducing the digital divide. As an organization this program has greatly supported the youth demographic in which we work by providing access to technology that allows our participants to continue to engage and learn through online means.”

~ Justin McGuire, Job Placement Specialist, Youth Opportunities Unlimited

re//BUILD.IT Community began with generous technology donations from the community, and financial support from United Way Elgin-Middlesex/Government of Canada, Elgin County, Kinsmen Club of St. Thomas, Elgin Business Resource Centre and Green Lane Trust.



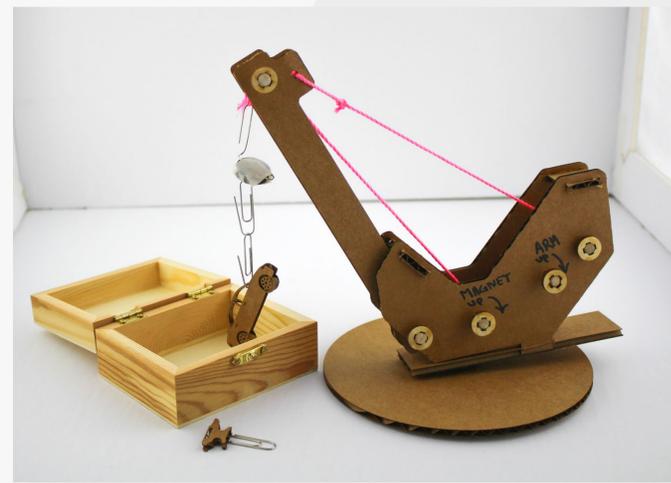
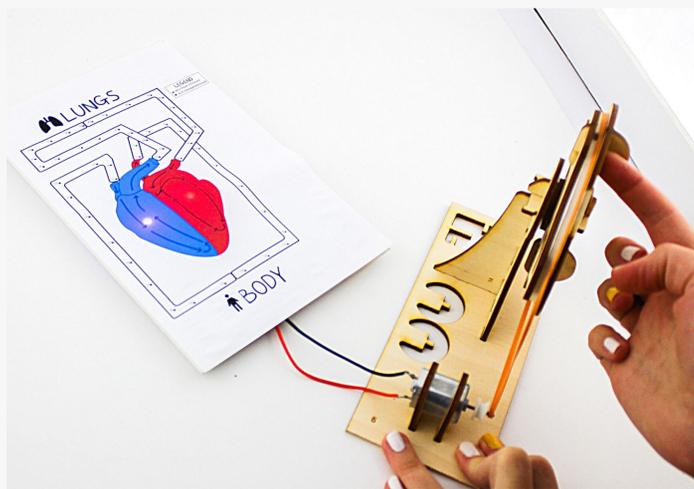
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# Reimagining Camps and Workshops

## Engaging Every Learner Where They Are

When most public programs for kids were cancelled in 2020, STEAM Education was approached to create four weeks of 'summer camp at home' for children supported by Family and Children's Services. We brought our [award winning](#) camp experience to kids 4-16 years old with fully accessible instructions, considering those with and without access to a computer or internet. Camp was a success and with our new learning management system in place, we were set to take on delivering a phenomenal asynchronous summer Camp@Home experience for kids in 2021.

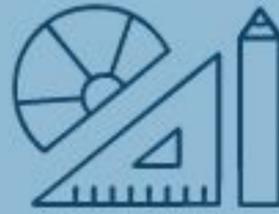
Secondary and postsecondary student Leaders worked to create five days of hands-on activities for two themes. Bold Biology campers explored topics like microbiology by making petri dishes to grow bacteria, and physiology by constructing a circuit model of the circulatory system. Super STEAM campers became system architects and visioneers, using art forms like sun printing to create blueprints and designing a mechanical automaton. The activities were so fun, most campers reported the whole family joining in!



## OUR CAMPS & FIELD TRIPS

"As a parent I am very impressed with all the work put into this Camp Week Kit. The detailed booklets with the experiments and the extra craft/builds (hands on) related to the main topic are fantastic. All of the extra information and materials are great and definitely add to the knowledge base and help deliver the concepts in a way that both the student and the parent can get a lot out of the experience."

- Kim Seguin on Bold Biology Camp



## OUR COMMUNITY IMPACT

"The STEAM Education Centre has a program where they get Western Students to design a process. It's a program meant to give students opportunities to get involved in critical thinking and prototyping solutions to local and persistent problems. So these students worked with STEAM and they worked with us and they just did an awesome job,"

- Justin Lawrence, City Engineer, City of St Thomas



## OUR STUDENT LEADERS

"Thank you so much for being such wonderful partners and mentors on this project. I could not have imagined a better organization to work with and I have loved learning more about your organization and all of the amazing things you do for the community."

- Lauren, UWO Student, STEAM Community Studio program



## OUR COMMUNITY IMPACT

"The opportunities that Steam Education has provided our clients is beyond amazing."

- RSSW, Transition to Employment Mental Health Worker referring to the re//BUILD.IT Community Computer Donation Program



# What are people saying about the STEAM Education Centre?

## OUR SCHOOL PROGRAMS

"The school partnership with STEAM is "bringing families together. Empowering students and engaging adults."

- Jeff Clark, Antler River Elementary School teacher



## OUR COMMUNITY PROGRAMS

"I just wish to extend my deepest thanks to all of you for the work you do, I just recently received a computer through your program and I must say it is beyond anything I could have expected, let alone afford. The ability to reconnect w/ my family in London and British Columbia has been such a gift that I really cannot express it enough, and the hardware itself is amazing,"

- Christopher, re//BUILD.IT Community computer recipient



## OUR COMMUNITY SUPPORTERS

"The City would like to thank the students and STEAM for developing this reuse concept. As a City, we need to make changes in our lives to support the 3 R's in their order. Reduce – buy less and buy quality, Reuse – fix it, upcycle, or give to someone who will, and then Recycle."

- Mayor Joe Preston



# Thank you!

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