

Room 2042

Something's happening in Room 2042.

For the students of Riverview High School in Moncton, N.B., it's Mr. Fogarty's cool physics class.

For North American educators, it is one of the most honoured teaching models, with over 50 provincial, national and international awards.

And for those seeking innovation in student outcomes in math and science, it is the start of a movement for change.

Room 2042 is Ian Fogarty's living lab. Here he seamlessly integrates technology – SMARTboards, collaborative software, cloud-based learning – with lesson plans that tackle complex scientific questions about space, life sciences and computer networks.

How does Room 2042 work?

Room 2042 is an innovative learning process. It uses a combination of technologies to enable students to personalize their learning on their own and in groups. Students interact with the curriculum using the platforms, tools and strategies that work for them. The end result is higher grades and a deeper understanding of math and science.

Room 2042 plants the roots for life-long STEM learning.

For example we use *probeware*, scientific probes that interface with computer equipment to collect, measure and analyze data, which allows students to collect and display experimental data quickly, freeing time for students to design and iterate around their findings. Our classroom *SMARTBoards* enable students to share their findings with each other and collaborate on building solutions using a combination of data, critical thinking skills and their natural curiosity to experiment and create.

The Room 2042 learning method is a living lab for both its students and for Ian Fogarty. Ian has learned along with his students. Beginning in 1998, Ian has systematically introduced new technologies and learning strategies into his curriculum, observing student reactions and success rates and then adjusting his teaching methods to magnify its impact.

The results are impressive.

Room 2042 have been recognized globally through more than 50 provincial, national and international awards and grants including:

- The American National Science Teachers Association STEM Educator Award (March 2015);
- The New Brunswick Innovation in Education awards (2000,2003);
- The highest scoring recipient of the Prime Minister's Award for Excellence in Education (2008)
- The Canadian Association of Physicists High School Teacher Award (2013);
- The Telus Technology in the Classroom grant (2014);

- The first Canadian to podium at the Global Innovation in Education Awards (2010) and,
- The Canadian Innovation in Education Council Grant (2014).

In March 2015 Ian was invited to join the MindShare Learning national advisory board. MindShare Learning is Canada's leading EdTech company, with a client list that includes Adobe, Dell, Discovery Education Canada, EPSON, Intel Canada and Smart Technologies Canada.

Room 2042 is a classroom unlike any in Canada – but it doesn't have to be.

It's proven learning method of STEM education is now in use in 20 other learning institutions in places like Colorado, China and Great Britain, with the potential to grow with the support of a great partner who shares our vision to transform how children and teens learn.

Room 2042's module design enables teachers to customize the Room 2042 learning method to create a collaborative classroom that caters to the specific learning needs and levels of their students. Students not only learn the content, they also learn to work in groups, to think deeply about content, to act like scientists and to take individual responsibility.

Room 2042 is a proven, scalable model for innovation in education, but to accomplish that we need your help.

This 21st century learning approach, has, to date, been accomplished on turn of the century equipment. Room 2042's laptops are about 10 years old, which means about 20 per cent of our students' time is spent waiting for experiments to be processed and/or saved. Room 2042 needs to increase the number of SMARTboards; currently 10-12 students can collaborate at a time, less than half the number of students of an average classroom. Internet and wireless connections are limited and slow, impairing students' ability to take full advantage of cloud-based learning technologies.

We are seeking a \$125,000 investment to driving change within the public education system. Your financial contribution will enable Room 2042 to purchase new learning technologies and to promote its innovative model to other educators in New Brunswick, Atlantic Canada and around North America. In addition, our partners professional expertise will assist the Room 2042 team as we scale our learning model into other schools and educational disciplines.

Our passion for getting kids hooked on math and science sits at the core of what we do.

In Room 2042 we use math, science and technology to:

- Create a unique learning experience that gives students the freedom to explore, create and innovate;
- Empower students to recognize their capabilities to be future changemakers; and,
- Build fun and supportive teams that work together to achieve shared goals.

Most of all we build passion in young women and men to want to become that next generation of scientists and engineers that will drive crucial innovation in Canada's future economy.

Please join us in Room 2042...and help us open the door to a world of creative learning for teens.

