



FLIGHT

MF-AR-2016

RANK

CREW

NAME

(PLEASE PRINT NAME)

CREW HANDBOOK

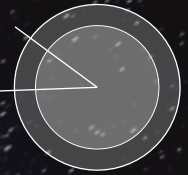




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Briefing Notes



Welcome aboard!

If you are reading this, congratulations! You've been selected to join us on our mission to prepare youth for the demands of the future through creativity, critical thinking, and global relevance.

These are very exciting times for science education in Alberta. In Edmonton, students are investigating agriculture on Mars. Calgary students are researching ways to filter pesticides from water. Lethbridge students are investigating ways to make blood clot faster, and in Canmore, students are at work researching ways to break down stubborn materials in wastewater systems. These students will potentially provide solutions to global issues, making Alberta highly influential in a world rapidly evolving towards space travel and life on Mars.

The commanders of our future will be those who problem-solve, innovate, and collaborate. It's the guiding principle behind our support for teachers and students throughout Alberta and across Canada. It's also why we're proud to share that across Canada this past year, we served 630 communities in English and 374 in French with our science, technology, engineering, and mathematics (STEM) resources.

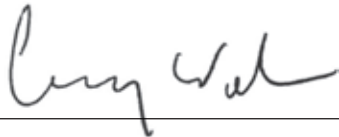
We recognize the amazing teachers who play a role in Canada's success. The results of our brilliant students and overall dedication to a better future have been staggering. In the most recent PISA 2015–Science scores (released in 2016), Canada placed in the top seven globally. Alberta ranked second globally (just behind Singapore), and British Columbia and Quebec ranked third and fifth, respectively. Through contributions big and small, we are very proud to be part of a K-12 educational system considered a scientific leader among all Organization for Economic Co-operation and Development (OECD) countries.

Highlights of this year's mission include the release of Wonderville.org's enhanced digital learning platform, with highly sought-after teaching tools such as a classroom dashboard, knowledge assessment tools, and lesson plans. Ignition Packs have now been deployed to over 5,000 students. We've also expanded geekStarter to include robotics alongside high-level computer programming and synthetic biology projects. As well, we continue to ensure rural communities receive highly in-demand resources.

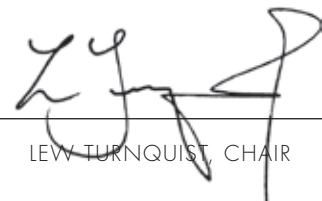
We whole-heartedly thank our supporters, including the Government of Alberta, Alberta Innovates, Canadian Heritage, and NSERC for their investment in MindFuel's mission. Looking ahead, we are encouraged by the feedback we receive that our programs are positively impacting society. Whether it's our research into gender's influence on learning and teaching styles with the University of Calgary's Schulich School of Engineering or our studies into the effects of game-based learning in the classroom, we are reaching for the stars in our efforts to complement the Alberta government's work to diversify and strengthen the economy.

One only has to look at the students MindFuel is able to reach and the teachers we support, to know that the future looks brighter now than ever before.

With your help, we will be able to keep it that way.



CASSY WEBER, CEO



LEW TURNQUIST, CHAIR



WE USE TODAY'S SCIENCE TO SHAPE
TOMORROW'S EXPERTS





MISSION **WONDERVILLE.ORG**

MAKING LEARNING FUN
THROUGH A DIGITAL PLATFORM





ANALYSIS

Wonderville.org gives students and teachers the opportunity to explore the world of STEM through engaging games, videos, activities, and career showcases. Wonderville’s content highlights real-world scenarios and topics that support curriculum outcomes.

Objectives

- Encourage students to think critically to develop inspired solutions to current global challenges
- Spark an interest in science at an early age to shape a future pursuit of diverse, rewarding STEM careers



TACTICAL HIGHLIGHTS

An enhanced experience launched for teachers

Imperative to this mission’s success was the rollout of a new, enhanced digital learning platform for teachers, in March 2016, after three years of field testing. This low-cost, value-added platform allows teachers to monitor class progress, assess student work, and create and customize assignments all from one central control panel. They also get access to STEM-based lesson plans and engaging digital resources created by MindFuel’s team in collaboration with industry and academic subject matter experts.

Teachers: over the moon

“Wonderville is an amazing resource. Having students play the games and use the resources allows them to make meaningful connections between the science concepts they learn in-class and the world outside the classroom.”

Melissa Easton, grade 7 science teacher

“In schools, we are always looking for ways to impact student learning in a meaningful, manageable, powerful way. It is far more interesting to learn in ways besides a textbook, and since we live in a digital world, we want to find more experiential ways to do things. Wonderville is a digital resource that includes a lot of student feedback in its design and, because of that, it’s proven to me to be a pretty powerful resource in the hands of students.”

David Ball, middle school principal and district administrator



STATUS:
MISSION
ACCOMPLISHED



FUTURE OPERATIVES

Expand to school board administrators

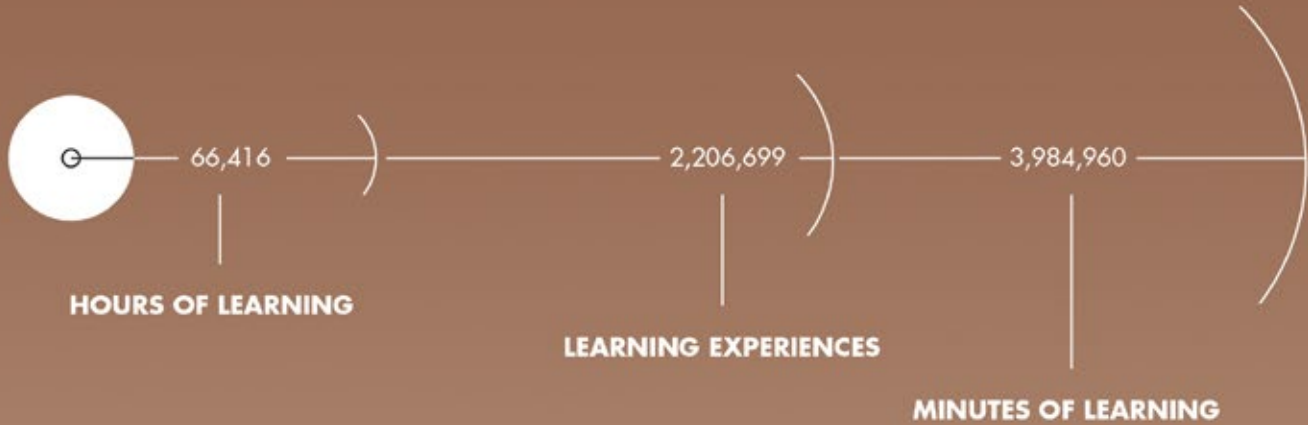
Wonderville is expanding its scope to school board administrators. An administrator platform and improved user experience is currently in development, and will launch in the upcoming year.

Storm Chasers: Raging Skies

This computer game puts students in the driver’s seat, letting them hit the road to chase storms. They can take measurements, make observations, and identify different types of storm activity while keeping the local radio station updated to help everyone in the community remain safe. Players earn virtual cash to upgrade their vehicle and gain time bonuses. This realistic game uses amazing real-life video footage from storm chasers, taking them close to the action. The game remains engaging, as its difficulty shifts based on the player’s ability to observe and identify storms. This digital, game-based science assessment is being developed with evidence-centred game design in partnership with the Werklund School of Education, University of Calgary (with thanks to Dr. Man-Wai Chu, Ph.D.).

MISSION WONDERVILLE.ORG

FACTS & FIGURES



81% of students

"I have an increased interest in science after using this Wonderville activity."

81% of students

"I think learning science this way is fun."

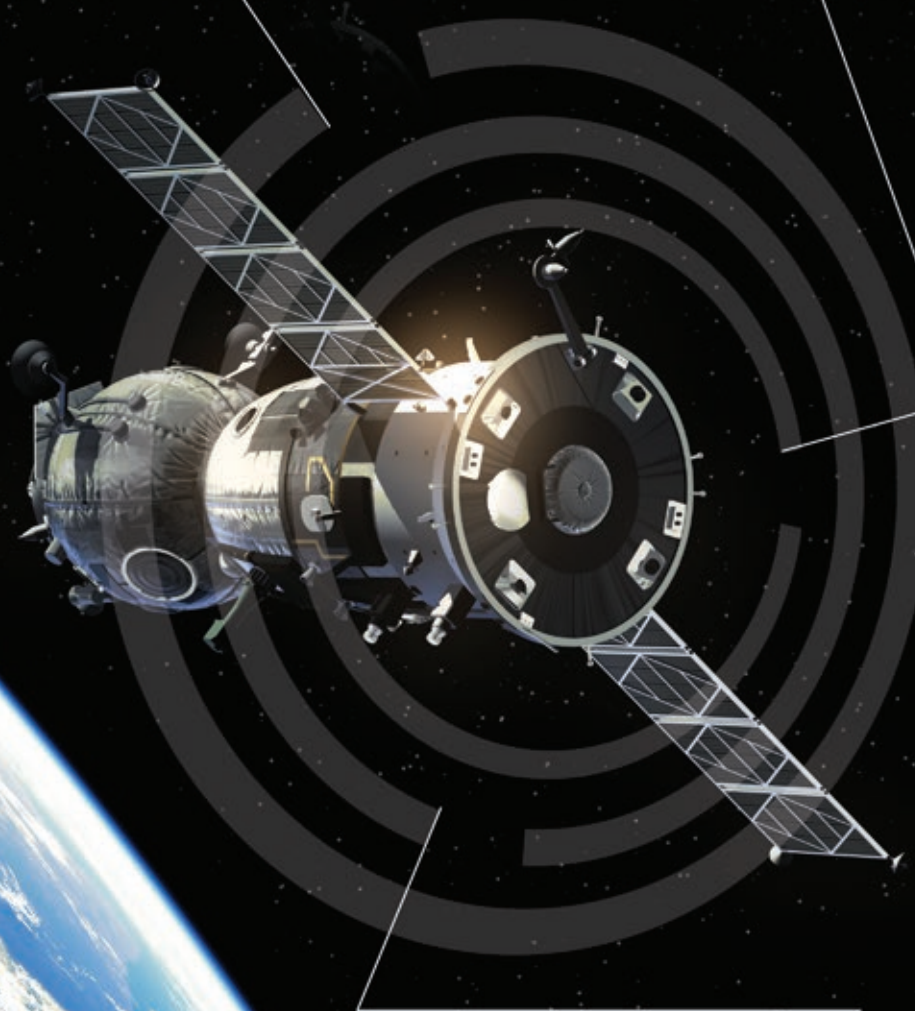
Based on MindFuel surveys, all results include "strongly agree", "agree", and "neutral" on a five-point scale.

87% OF TEACHERS

"The learning resources on Wonderville.org helped me teach this science topic."

90% OF TEACHERS

"The science content on Wonderville.org was relevant to the topic and grade level."



90% OF TEACHERS

"The learning resources on Wonderville.org engaged my students on this science topic."

WONDERVILLE FACTS AND FIGURES

NORTHWEST TERRITORIES ENGLISH

Communities: **6**
Learning Experiences: **83**

NUNAVUT ENGLISH

Communities: **2**
Learning Experiences: **363**

ALBERTA ENGLISH

Communities: **70**
Learning Experiences: **405,731**

SASKATCHEWAN ENGLISH

Communities: **46**
Learning Experiences: **7,135**

YUKON ENGLISH

Communities: **1**
Learning Experiences: **53**

ALBERTA FRENCH

Communities: **44**
Learning Experiences: **13,031**

SASKATCHEWAN FRENCH

Communities: **12**
Learning Experiences: **237**

YUKON FRENCH

Communities: **1**
Learning Experiences: **16**

BRITISH COLUMBIA ENGLISH

Communities: **97**
Learning Experiences: **10,342**

BRITISH COLUMBIA FRENCH

Communities: **31**
Learning Experiences: **741**



WONDERVILLE FACTS AND FIGURES

QUEBEC ENGLISH
Communities: **95**
Learning Experiences: **2,024**

QUEBEC FRENCH
Communities: **167**
Learning Experiences: **26,334**

MANITOBA ENGLISH
Communities: **42**
Learning Experiences: **7,654**

MANITOBA FRENCH
Communities: **12**
Learning Experiences: **446**

ONTARIO ENGLISH
Communities: **202**
Learning Experiences: **92,033**

ONTARIO FRENCH
Communities: **76**
Learning Experiences: **8,928**

ATLANTIC CANADA ENGLISH
Communities: **69**
Learning Experiences: **12,525**

ATLANTIC CANADA FRENCH
Communities: **29**
Learning Experiences: **1,595**





WONDERVILLE.ORG - ENGLISH



FR.WONDERVILLE.CA - FRENCH



WONDERVILLE FACTS AND FIGURES
177 COUNTRIES REACHED SINCE 1990



CANADA
Learning Experiences: **539,017**

UNITED STATES
Learning Experiences: **1,277,282**



UNITED KINGDOM
Learning Experiences: **18,234**

SPAIN
Learning Experiences: **6,819**



UNITED ARAB EMIRATES
Learning Experiences: **3,028**

INDIA
Learning Experiences: **12,934**

HONG KONG
Learning Experiences: **11,597**

SINGAPORE
Learning Experiences: **7,921**



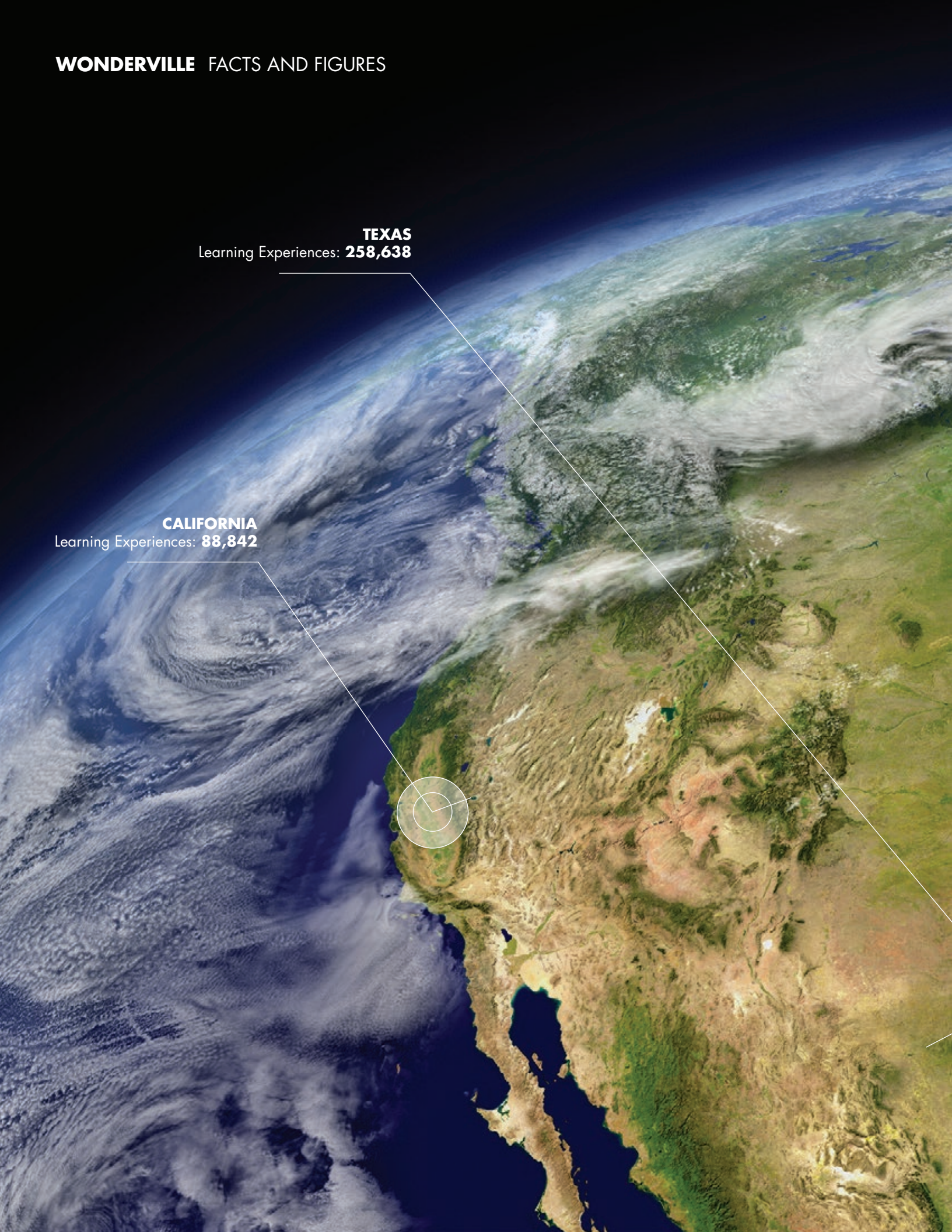
AUSTRALIA
Learning Experiences: **28,087**

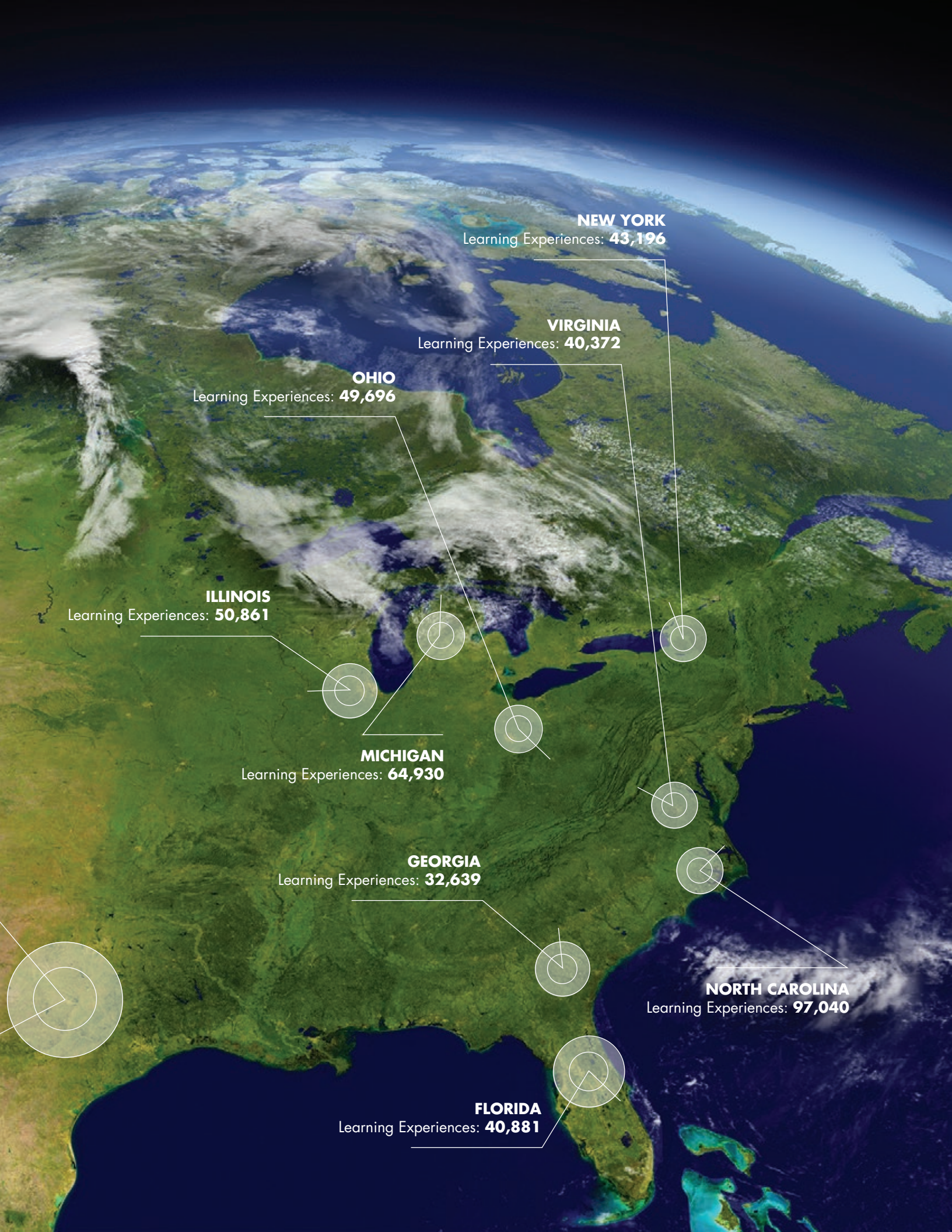
NEW ZEALAND
Learning Experiences: **5,596**

WONDERVILLE FACTS AND FIGURES

TEXAS
Learning Experiences: **258,638**

CALIFORNIA
Learning Experiences: **88,842**





NEW YORK
Learning Experiences: **43,196**

VIRGINIA
Learning Experiences: **40,372**

OHIO
Learning Experiences: **49,696**

ILLINOIS
Learning Experiences: **50,861**

MICHIGAN
Learning Experiences: **64,930**

GEORGIA
Learning Experiences: **32,639**

FLORIDA
Learning Experiences: **40,881**

NORTH CAROLINA
Learning Experiences: **97,040**



MISSION **IGNITION PACK**

BRINGING CLASSROOM SCIENCE TO LIFE
WITH ENGAGING, INTERACTIVE DIGITAL
TOOLS AND REAL-WORLD, HANDS-ON
ACTIVITIES AND EXPERIMENTS





ANALYSIS

Developed and tested by teachers for teachers, Ignition Packs contain resources an educator needs to teach a full unit of science. As an upgraded version of the popular Science-in-a-Crate program and a permanent classroom resource, Ignition Pack continues to gain traction in classrooms across the province with four units currently available for grades 5 through 8. Thanks to the generous support from the Rotary Club of Calgary West, 10 Calgary schools each received one Grade 8 Mix & Flow of Matter Ignition Pack.

Objectives

- Meet students' diverse learning needs with a permanent classroom resource
- Provide teachers with educational material covering an entire science unit



TACTICAL HIGHLIGHTS

Rotary and MindFuel collaboration

One of Rotary's areas of focus is education and literacy, so the club chose to fund the deployment of Ignition Packs as a way to support a specific and tangible resource whose digital interactive units speak the language of today's youth. For Bill Lawless and his fellow Rotarians, one of the highlights was to meet and talk with the teachers who will use the Ignition Packs. "I believe the teachers will benefit by having less stress on preparation and more emphasis on simply teaching."

Teacher-approved lessons

Eleanor Gills, a Calgary science teacher, immediately saw the program's benefits after using a donated Ignition Pack with her grade 8 class for the first time. "It is extremely helpful for planning. We don't need to source out materials. The hands-on examples are excellent for helping the students visualize the concepts being discussed." She has also found that one of the benefits of the Ignition Pack is that it helps the students develop original ideas, since they are asked to design experiments to test certain properties of known and unknown substances on their own.

Community and stakeholder engagement

Ignition Pack's development was funded by Alberta Energy, ConocoPhillips Canada, Imperial Oil, RBC Foundation, Scott and Anne Kirker, Syncrude Canada Ltd., and TD Friends of the Environment. Distribution was funded by ConocoPhillips Canada, Genome Alberta, Rotary Club of Calgary, Rotary Club of Calgary North, Rotary Club of Calgary West, and Syncrude Canada Ltd.



FUTURE OPERATIVE

Expand distribution

MindFuel's focus in the past year was on creating partnerships to deploy Ignition Packs developed to date, and is preparing to launch an additional 40-50 Ignition Packs throughout Alberta in 2017-18 to rural and urban schools, including currently underserved areas.



STATUS:
MISSION
ACCOMPLISHED

IGNITION PACK FACTS AND FIGURES

Students Reached

5,091

Teachers Reached

89

Packs Distributed

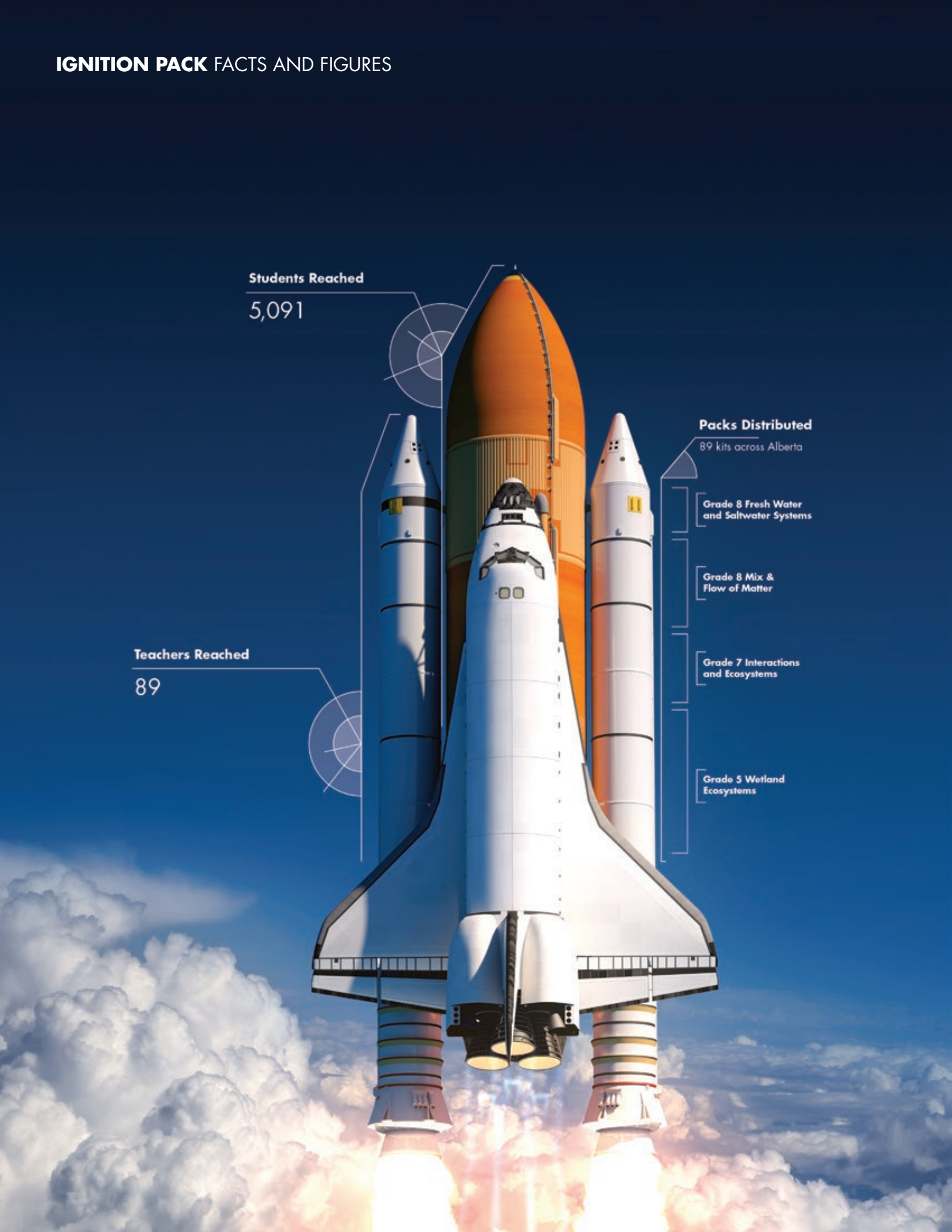
89 kits across Alberta

Grade 8 Fresh Water and Saltwater Systems

Grade 8 Mix & Flow of Matter

Grade 7 Interactions and Ecosystems

Grade 5 Wetland Ecosystems





Rotary Club of Calgary West purchased and donated 10 Ignition Packs that went to Calgary schools.





MISSION **EDACITY**

CREATING STEM INNOVATORS
AND ENTREPRENEURS





ANALYSIS

Edacity's three high school course resources – Dream It!, Build It!, and Expand It! – align with Alberta's Career and Technology Studies outcomes for ENT 1010, 2010, and 3020. The modules are focused on developing student skills critical to entrepreneurship such as critical thinking, creative problem solving, and effective risk taking. By challenging students through project-based learning, the courses encourage them to expand their definition of entrepreneurship and see potential for innovation in STEM.

Objectives

- Develop STEM innovation and entrepreneurial programs for grades 8-12
- Implement programs, summer camps, and for-credit course work delivered through career and technology studies (CTS)



TACTICAL HIGHLIGHTS

Summertime science

Piloted in summer 2016, our Invent-O-Rama Summer Camp was an overwhelming success. Each day, campers learned a science and engineering concept and applied their learnings in fun and creative ways. For example, they learned about the safety, design, and purpose of vehicle roll cages. Then, they each designed a roll cage for an egg and competed for whose egg would survive when thrown against a wall.

Student-approved

"The art of entrepreneurship is creating, solving, and reiterating innovative problems as well as solutions. ENT was one of the most enjoyable and educating courses I've ever taken."

Elian Dupré, Student, Our Lady of the Snows Catholic Academy



FUTURE OPERATIVE

Continuous development

Edacity will continue to develop and offer programs that bring out the entrepreneurial spirit in students, with a focus on real-world STEM issues, innovation, and creativity.



STATUS:
MISSION
ACCOMPLISHED



Students at Invent-O-Rama Summer Camp.

MISSION EDACITY

FACTS & FIGURES

391

Total Students Reached

63,760

Hours of Learning

100% of teachers

"MindFuel is a credible source of STEM education learning resources."

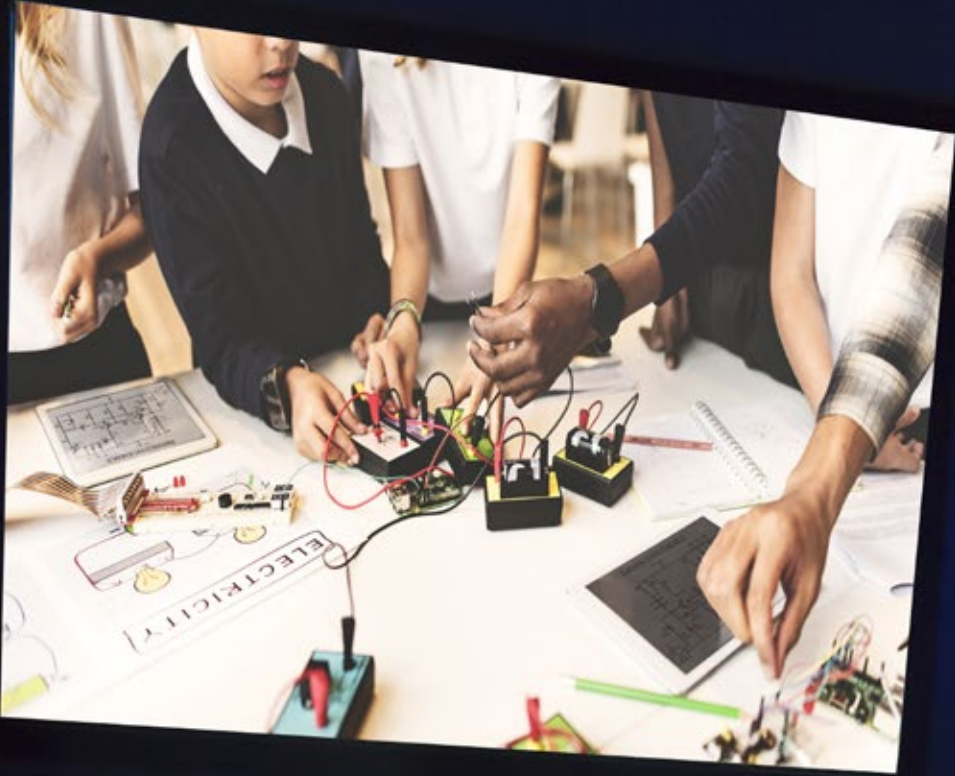
100% of students

"I think learning science this way is fun."

96% of students

"I can see myself working in science."





MISSION GEEKSTARTER: AN EDACITY PROJECT

SUPPORTING ALBERTA'S STUDENTS
TO SOLVE REAL-WORLD PROBLEMS USING
SYNTHETIC BIOLOGY & ROBOTICS

00:00:02:20



00:00:02:20



ANALYSIS

geekStarter, which is operated by MindFuel and funded by Alberta Innovates, pairs student teams with industry and academic experts. This sets them up to enter the field with valuable experience. Through project-based learning, each student will spend between 200 and 400 hours of extracurricular time during the school year learning about their field of innovation. With the support of geekStarter, synthetic biology students showcase their incredible work on the international stage at competitions like iGEM (International Genetically Engineered Machine) hosted annually in Boston, Massachusetts, and robotics students are able to compete regionally and nationally in the First Robotics competition.

Objectives

- Prepare students to be STEM innovators
- Give students the opportunity to work collaboratively on a project that has a tangible, real-world outcome with commercialization potential



TACTICAL HIGHLIGHTS

geekStarter robotics

For the first time since its inception, geekStarter supported robotics, which supports its mandate to pursue emerging fields of technology. The three teams, two of which are part of First Robotics (Calgary and Fort McMurray) and a third team from Edmonton, are not only building innovative robots: they are also learning about ethics, simple communication of complex concepts, and presentation skills. The two First Robotics teams competed at the Western Canada First Robotics competition in Calgary, where the APEX Robotics team based out of Protospace Calgary finished sixth out of 50 teams.



STATUS:
MISSION
ACCOMPLISHED



FUTURE OPERATIVES

Continue to shape career aspirations

geekStarter gives young students the opportunity to explore a world of innovative science and technology they wouldn't otherwise be exposed to. It also has a profound influence on their post-secondary studies and career paths.



The synthetic biology geekStarter team from Our Lady of the Snows Catholic Academy, Canmore.

MISSION GEEKSTARTER:

AN EDACITY PROJECT

FACTS & FIGURES

5 Collegiate Teams

4 Comprehensive Workshops Offered Throughout the Year



25 Mentors

9

High School Teams

29

Subject Matter Experts

329

Students
Participating

6

**Teams who Traveled to Boston
to Compete in iGEM**

(International Genetically Engineered Machine)



PARTICIPANT FOCUS: NIKAYLA

"I got to learn things in high school that you don't normally get a chance to explore until you're doing your master's degree. geekStarter allowed me to engage in some extremely elite and advanced science on the back counter of our school science lab!"

Challenge

In the small, rural town of Consort, Alberta, there weren't a lot of extracurricular clubs in Nikayla's K-12 school of 200 kids. So, when her science teacher started an iGEM team with funding from geekStarter, Nikayla jumped at the chance to participate.

Solution

Nikayla and her team chose an issue involving the two biggest industries in the area: agriculture, and oil and gas. The students wanted to develop a sensor to detect xylene (a naturally-occurring hydrocarbon in petroleum) in soil when land is reclaimed from the oil patch.

Results

The team created modified E.coli bacteria that turns green when it comes into contact with oil. The team took their project to iGEM's annual competition at the Massachusetts Institute of Technology (MIT) in Boston, where they were ranked one of the top five high school teams in the world.



PARTICIPANT FOCUS: CHRIS

"Getting involved in geekStarter showed me that I don't have to wait for approval or direction. It made me more interested in showing initiative, taking a risk, figuring things out for myself."

Challenge

Chris achieved good grades in high school, but was losing engagement and a sense of what he wanted to do after graduation and into adulthood.

Solution

Chris joined the geekStarter iGEM team at his high school in 2012, and has been involved either as a team member or a mentor ever since. Notable projects he's worked on include developing bacteria that produce insulin, creating bacteria that produce oxytocin (his team won first place at the iGEM competition that year), tackling the problem of antibiotics in the water supply, and combatting a parasitic mite of the honey bee.

Results

Chris' newfound sense of entrepreneurialism led to the creation of a small company. Its focus is on bringing a sustainable bio pesticide to market that is good for the environment, agriculture, and the economy. Chris will graduate from the University of Lethbridge with a degree in biology this spring, and plans to continue his studies in either engineering or business.



SPECIAL PROJECTS

MindFuel actively collaborates with other subject matter experts, post-secondary academics, and educators in research to conduct a series of Special Research Projects throughout the year. The projects detailed in this dossier were designed to investigate innovative teaching methods and to understand how to best serve students.

RESEARCH MANDATES

INCREASE STUDENT ENGAGEMENT IN STEM

MAKE STEM APPEALING AND ACCESSIBLE TO ALL STUDENTS,
REGARDLESS OF AGE, GENDER, OR GEOGRAPHY



PROJECT **INNOVATION EXCHANGE**





PROJECT PHYSICS FUEL





PROJECT BACKGROUND

Research shows that physics has the lowest enrolment of the three major scientific high school streams, the other two being biology and chemistry. As a pre-requisite for post-secondary engineering programs, only a fraction of the student population is prepared for entrance.

Challenges

- Lagging enrolment in high school-level physics compared to other sciences
- Only 21% of all students complete grade 12 physics
 - › Of these students, only 38% are female (National Science and Engineering Council of Canada [NSERC], 2010).

Methodology

With financial support from the Schulich School of Engineering at the University of Calgary and NSERC, MindFuel and Schulich are investigating the barriers that keep students from pursuing physics at the high school level. Our research focuses on connections between gender, learning styles, and attitudes towards physics.

Takeaways

We are studying how cross-disciplinary, collaborative projects and interactive digital resources can help engage students. Preliminary findings from this project were presented at the 2016 American Society for Engineering Education (ASEE) Conference, and are on the agenda for the 2017 International CDIO (Conceive, Design, Implement, Operate) Conference.



STATUS:
IN PROGRESS



PROJECT **PRO-DEV**

PROFESSIONAL DEVELOPMENT IN EDUCATION



PROJECT BACKGROUND

From design thinking to integrated assessment to game-based learning, our team works with other educators to explore current topics in education.

Challenge

- Shifting educational paradigms by sharing our findings and best practices with teachers

Methodology

MindFuel presented at the following conferences to share insight:

- American Society of Engineering Education (K-12) – New Orleans, June 2016
 - › Presented “An Evaluation of a Digital Learning Management System In High School Physics Classrooms”
- Alberta Teachers’ Association Science Council Annual Conference
 - › Presented “Integrating STEM, Innovation & Entrepreneurship” and “Multiple Perspectives for Interdisciplinary Learning”
- Calgary City Teachers’ Convention
 - › Presented “Design Thinking in the STEM Classroom”
- The Werklund School of Education’s IDEAS Conference
 - › Presented “Development of a Digital Game-Based Science Assessment Using Evidence-Centered Game Design” and “Techniques for Improved Student Engagement and Perceptions Towards STEM Education”



STATUS:
IN PROGRESS

Takeaways

In the role of thought leader, MindFuel delivers sessions that share best-in-class STEM education programming. These offerings showcase our understanding of the personalized digital management environment, current trends in education, and future themes. We look forward to providing insights from our longitudinal research in the near future.

APPENDIX I

BOARD OF DIRECTORS

James K. (Jim) Gray

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Ron Woodward

Head Coach, Clockbuilder Consulting

ADVISOR AND FORMER BOARD MEMEBER

Stephen Burns, Legal Counsel

Bennett Jones LLP

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Registered Charity Number

13265 7065 RR0001

MINDFUEL OPS TEAM

Cassy Weber

Chief Executive Officer

Alma Abugov

Director, Development & Community Engagement

Brad Bill

Executive Assistant/Office Administrator

Brent Bawel

Senior Program Manager

Caitlin Quarrington

Manager, Education

Gwen Cowan

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Magdalena Pop

Project Manager

Margaret Glover-Campbell

Director, Programs

Matthew Ford

Quality Assurance Analyst

Peita Luti

Project Manager

Sabina Bauer Lewis

Grant Writer, Resource Development

Sue Stevenson Brown

Senior Advisor, Resource Development

Tammy Yamkowy

Director, Marketing & Communications

Victor Procure

Full Stack Developer



RIISING STARS: 2016 MindFuel Scholarships

The MindFuel scholarship program is an investment in Alberta's future. Our scholarships are awarded to students with a passion for STEM, innovation, and the community, entering their first year of studies at an Alberta post-secondary institution. The program addresses the shortage of knowledge workers focused on science, technology, engineering, and math in Alberta and Canada. Crucial to MindFuel's scholarship selection process is the essay students write, explaining how they will change the world using STEM. It is our goal to support the next generation of community service groundbreakers and fearless young visionaries.

JAMES (JIM) GRAY, FOUNDER & HONOURARY CHAIR

Annual: \$5,000, one award

2016 recipient – Adley Mok, University of Calgary

ANNE TINGLE, FOUNDING EXECUTIVE DIRECTOR

Annual: \$2,500, one award

2016 recipient – Poshika Dhingra, University of Alberta

DR. ARLENE PONTING, PAST CEO

Annual: \$2,500, one award (two were presented in 2016)

2016 recipient – Genna Friend, University of Alberta

2016 recipient – Gregory Neagu, University of Alberta

Introducing a new scholarship for 2017

ASTech Foundation

Annual: \$2,500, one award

First recipient will be announced later in 2017



APPENDIX III

DONORS

Albert Krygier
 Alma Abugov
 Anonymous (8)
 Bennett Jones LLP
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 Brent Bawel
 Calgary Technologies Inc.

Canada Online Giving
 Foundation, Anonymous (1)
 Canada Helps (1)
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 Jody Balko
 Julian Martin
 Lee Tasker Counselling
 Peter Kinash

Rhonda Gorman
 Rob Wallace
 Shahauna Siddiqui
 Tammy Yamkowy
 Tara Barnas
 The Pearson Group
 United Way of Calgary,
 Donor Choice Program,
 Anonymous (4)



The Honourable Kirsty Duncan, Federal Minister of Science, visited MindFuel offices (2nd from the left).



Calgary Canada 150 funding announcement hosted by the Honourable Kent Hehr, Federal Minister of Veterans Affairs.

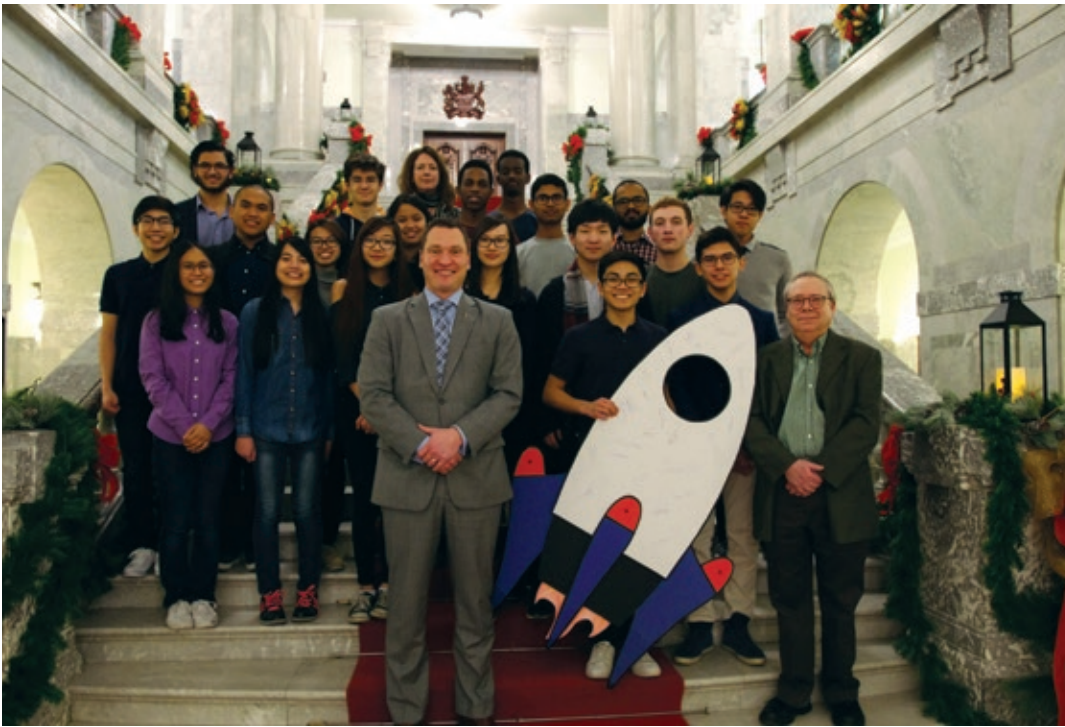
IN-KIND DONORS

Bennett Jones LLP
 C & B Advertising
 Cybera

DHR International
 Google
 Government of Alberta
 Infrastructure

Hookano
 Kerkhoff Technologies Inc.
 Microsoft

PwC
 UX Guys



Urban Tundra iGEM team meets the Honourable Deron Bilous, Minister of Economic Development and Trade, at the Alberta Legislature.



The geekStarter cheque presented to this Lethbridge team included the Honourable Shannon Phillips, Minister of Environment and Parks, MLA for Lethbridge-West; Maria Fitzpatrick, MLA for Lethbridge-East; and Lethbridge Mayor Chris Spearman.

PARTNERS

First Robotics
 ASTech Foundation
 Alberta Education
 Alberta Innovates
 Arbour Lake School
 Beakerhead
 BioTorks
 Bowness High School
 Calgary Airport Authority

Edmonton Public Schools
 Imagination 150
 Innovate Calgary
 Kids Up Front
 Leduc #1
 Mount Royal University,
 Bissett School of Business
 Mount Royal University,
 Faculty of Science

Mount Royal University,
 Institute for Innovation and
 Entrepreneurship
 Partners in Research
 Praxis
 STEM Learning Labs
 TEC Edmonton
 TELUS Spark
 TELUS World of Science

The Berkeley Program
 University of Calgary,
 Haskayne School of Business
 University of Calgary,
 Schulich School of Engineering
 University of Calgary,
 Werklund School of Education
 University of Lethbridge
 Waterloo Global
 Science Initiative

APPENDIX IV

GOVERNMENT



TRANSFORMER



CHAMPION

Anonymous Donor


ENERGIZER



COLLABORATOR

Canada – Alberta
Job Grant



A composite image of space. At the top center, the Earth is visible as a blue and white sphere. Below it, a bright star or light source creates a lens flare effect. The background is a dark field of stars. In the foreground, the heavily cratered surface of the Moon is visible, curving across the bottom half of the frame.

**"SOMEWHERE, SOMETHING
INCREDIBLE IS WAITING TO
BE KNOWN."**

- CARL SAGAN

