



Source: 3yr GoA Report 2016-2019

INSPIRE AND ENGAGE STUDENTS AND TEACHERS IN STEM EDUCATION

- Increased students' understanding and knowledge of science & STEM related topics through interactive learning experiences, real-world connections, creative problem-solving and critical thinking.
- Increased students' engagement in science classes with educational blended learning activities, such as digital games, interactives, videos, comics and hands-on experiments.
- Provided financial support to 14 Alberta undergraduate students in their first year of STEM post-secondary studies.

Activities & resources through MindFuel's programs:



- Wonderville.org (Eng & Fre)
- Ignition Pack
- Scholarship program



of students stated that "I learned something new about this science topic"

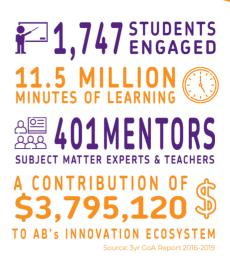
of teachers stated that "I consider Ignition Pack to be an innovative teaching tool that teachers can incorporate in their science classes".

- www.mindfuel.ca
- www.wonderville.ca
- mww.ignitionpack.ca

"Wonderville has some great resources that are tied to curricular outcomes and your students will really enjoy working with them." - Glenn G, Millarville Community School, Millarville, Alberta

"The wetland unit covered each curriculum objective clearly and completely. It is the most comprehensive, useful, convenient and complete science unit I have ever accessed. It is fantastic." Grade 5 Science Teacher, Wetland Ecosystems Ignition Pack user





BUILDING A CULTURE OF STEM INNOVATION AND ENTREPRENEURSHIP

- Increased grade 5-9 students' iterative problem solving and rapid prototyping skills in an in-class semester-long curriculum aligned CTF (Career and Technology Foundations) program that incorporates hands-on experiences and developing solutions for real-world challenges.
- Increased high school & collegiate students' STEM and entrepreneurial competencies and skills for future STEM studies and careers in an enrichment program based on student projects that develop innovative solutions for real-world problems using emerging STEM fields.
- Developed mentor and subject matter expert connections for students and teachers with community innovators and entrepreneurs.

Workshops, activities & resources through MindFuel's programs:



- geekStarter
- Careers Technology Foundation (CTF) Accelerator program
- Careers Technology Studies (CTS) for-credit course work



Reach in Alberta Communities

of students stated that "I can see myself working in science".

of teachers stated that "MindFuel's geekStarter program contributes towards Alberta students' science literacy, curiosity & interest being more successfully developed and nurtured".

www.mindfuel.ca www.geekstarter.ca "This workshop exposes students to diverse STEM topics and fundamentals of project building. These opportunities help students in career interests and team work that may be limited until post-secondary."

Lethbridge High School Team Advisor, Lethbridge.

40%

"I feel like this is a good experience and that it will help in life when we get older."

CTF Accelerator Pilot Program Student, Fall 2018 Cycle.





EMPOWERING EDUCATORS TO IGNITE A PASSION IN STUDENTS TO EXPLORE STEM AND ENTREPRENEURIALISM

- Increased teachers' professional learning and growth in STEM education by developing and delivering 20 professional learning workshops on a broad variety of STEM concepts and blended learning teaching practices.
- Developed quick tips videos and webinars available on Wonderville.org to provide classroom tips and examples of hands-on activities and projects to increase student interest, competencies building and engagement in STEM topics.
- Supported teachers' delivery of STEM lessons with hundreds of innovative alternatives to common STEM learning resources, assessments and lesson plans.

Professional learning and teacher support through Minduel's resources:

- Workshops & teacher resources
- Lesson plans & student digital and hands-on activities

90%

of teachers stated "Today's workshop information and activities will help me enrich and enhance my ability to teach STEM."

91%

of teachers stated "Learnings from this workshop will help make my STEM class more interesting and engaging for my students."

mww.mindfuel.ca

"Not only was the session informative and engaging but it connected me with colleagues to share ideas and collaborate." PL Teacher, Project-based Learning Workshop

"It was excellent to see genetic engineering's application in fashion. I think students will find that to be a great catch. LOVED the hands-on activity and very clear instructions. Seems very feasible in my classroom." Genetic Engineering Workshop