



## Entrepreneur's Toolkit

Students will explore and develop entrepreneurial thinking skills, a key ingredient in turning a new scientific discovery or innovation in technology into a usable product. Knowledge and skills necessary to be an entrepreneur are developed through STEM. The innovations in STEM provide opportunities for the use of these discoveries and technologies.

Students will develop an entrepreneurial mindset to deal with uncertainty, evaluate risk, embrace failure, inspire teams, and attract talent to their ideas. Entrepreneurs require a range of skills in order to work with people who have talents and abilities that complement their own. I-STEM Students in their entrepreneurial year will leverage their change making abilities to solve problems and create a positive, long lasting impact.

# I-STEM FRAMEWORK - YEAR 2



## ALL YEAR FOCUS

### Your Own Startup

Design innovative sustainable solutions for economic, social and/or environmental challenges.

Students bring their ideas to life and change the world in I-STEM Startups. Students will identify, create and act upon opportunities in order to create value, as they build and scale an idea sustainably. Student startups will be presented in a public exhibition.

#### Entrepreneur's Toolkit

Collaboration  
Communication Skills  
Creativity and Imagination  
Empathy Building  
Ethical Sustainability

Leadership  
Learning from Failure  
Networking  
Professionalism  
Risk Mitigation

#### FOCUS 1

### Backyard Entrepreneurship

Wherever you are, make it better.

Students use their own context to recognize and identify problems to solve. Through authentic projects, students will experience different types of innovative entrepreneurial concepts, such as design thinking, rapid prototyping, and team-building. They will share their ideas and win implementation support from their peers and I-STEM Faculty.

#### Entrepreneur's Toolkit

Collaboration  
Creativity and Imagination  
Empathy Building  
Networking

#### FOCUS 2

### Community Surroundings

Create positive social change through innovative entrepreneurship.

Students will continue to build skills to recognize larger problems that exist within their community. They will share their ideas with community partners and stakeholders and make proposals to drive community change. Students develop, test, and launch a business, all while gaining skills around problem solving, iteration, and collaboration.

#### Entrepreneur's Toolkit

Empathy Building  
Ethical Sustainability  
Communication Skills  
Professionalism

#### FOCUS 3

### Social Justice & Global Thinking

Leverage change making skills to solve problems that create a positive, long-term impact.

Students will develop an innovative idea for a not for profit organization that addresses one of the United Nations Sustainable Development Goals. They will consider how to fund, manage risk, promote and implement their business plan. Students will further develop the skills needed to network and collaborate for social justice and community development.

#### Entrepreneur's Toolkit

Collaboration  
Creativity and Imagination  
Ethical Sustainability  
Risk Mitigation

#### FOCUS 4

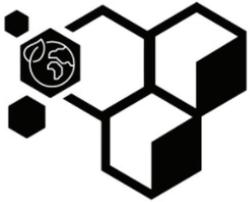
### Technology to Change the World

Envision the future and assess opportunities created by disruptive technological change.

Students will use their growing knowledge of technology and design thinking to develop a product that addresses a globally relevant challenge. They will learn how an entrepreneur finds funding to support product development, builds a business model, protects intellectual property and understands their customers.

#### Entrepreneur's Toolkit

Collaboration  
Creativity and Imagination  
Empathy Building  
Networking



# Entrepreneurship

In the I-STEM program, students will contribute and thrive in our technologically intensive world through interdisciplinary learning opportunities connecting Science, Technology, Engineering and Math (STEM). Learning in the classroom is paired with experiential learning and mentorship with the community and workplace.

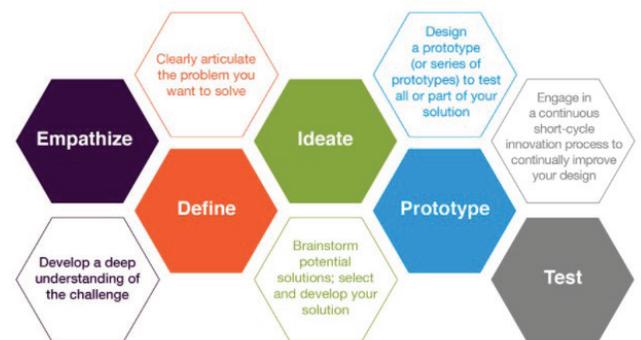
In their Grade 10 year, students will develop their Entrepreneur's Toolkit. With an emphasis on human-centered design, an understanding of innovation and finding big problems to solve, I-STEM students will further develop their entrepreneurial mindset to create a business plan, and launch their own business.

In addition to learning the curriculum of Grade 10 Science, English, Civics and Careers and Mathematics, as well as electives in Technology or Computer Programming students will develop skills in:

|                                   |                              |
|-----------------------------------|------------------------------|
| <u>Collaboration</u>              | <u>Leadership</u>            |
| <u>Communication Skills</u>       | <u>Learning from Failure</u> |
| <u>Creativity and Imagination</u> | <u>Networking</u>            |
| <u>Empathy Building</u>           | <u>Professionalism</u>       |
| <u>Ethical Sustainability</u>     | <u>Risk Mitigation</u>       |

I-STEM students will connect with and be mentored by real entrepreneurs who will provide valuable interactive feedback on their ideas, plans and products.

Students will be continuously asked to research, reflect on and refine their business plan while focusing opportunities in solving complex real world problems. Students can expect to showcase their innovative ideas and entrepreneurial skills often to members of the public and their peers.



Source: d.school, Stanford University