Let’s Talk About the Future of STEM Education in Canada
Have you heard of STEM? It stands for Science, Technology, Engineering and Math. STEM related subjects are where you study or use knowledge and skills related to these topics.

Given the increasing pace of technologically-driven change, now is a great time to rethink STEM in schools. Today we’re hoping you can help us design a better way to teach and learn STEM by hosting a conversation that captures the opinions and experiences of young people. We will use your opinions and experiences to help shape the future of STEM education in Canada as part of the Canada 2067 initiative.

You can use this workbook to help capture insights from your conversation, though if you have access to a computer and an internet connection, we recommend you input your answers directly at: 

**www.canada2067.ca/youthvoice**

If you choose to handwrite, try to write as neatly as you can - this will make it easy for you to type it up and share it with us online, or for our dedicated team to read your answers if you choose to mail the workbook in. See the “Next Steps” section at the end of the workbook for more information.

Feel free to capture what you feel is most relevant and interesting. You may wish to capture random answers, or share patterns you see in the answers, or whatever works best for your context.
LEARNING AND STEM

Record the number of yes and no responses below.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you know that over 70% of all future jobs in Canada will need STEM-based knowledge or expertise?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you know that less than half of students graduate high school with the STEM background needed to pursue post-secondary STEM education and jobs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does that fact surprise you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you think there could be changes made to the way STEM is taught and experienced in school that would increase the number of students who choose to stick with STEM?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has anyone ever asked you what you think is important to learn in school?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you wish you would be asked about what you think of school more often?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Let’s talk... about STEM and everyday life
Let’s talk about STEM in your everyday life

Think about what you’ve learned so far in STEM-related subjects over the years in school. Think about all the different courses you’ve taken that relate to science, technology, engineering, math and related subjects.

1. What’s been the most useful STEM topic or concept you’ve learned so far that you could use in your everyday life? Why has that been useful? How does it relate to everyday life?

2. Is there anything you’ve learned so far in STEM-related subjects that you wish you could learn more about in school?

3. If so, what? Why do you think there wasn’t or isn’t more of that taught today?
Let’s talk about success in STEM beyond grades

Think about a time in a STEM-related subject that you felt you had succeeded at something, no matter what grade or mark you received. If you can’t think of a time in school, think about a time outside of school. If you can’t think of anything STEM related, you can use an example of another time you feel you really succeeded in a subject, no matter what grade or mark you received.

1. What were you learning? When and where was the learning happening? Who encouraged you? Describe what happened.

________________________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________________________

2. What made you feel like you had succeeded?

________________________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________________________

3. How, if at all, did this feel different than when you’ve received a high mark?

________________________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________________________

Thinking about your previous answers as well as other experiences you’ve had, what do you think are the most important ways of measuring success in STEM-related subjects other than grades?

1. Technology in class
2. Hands-on and practical learning
3. Field trips
4. More information about STEM jobs and careers
5. Hearing stories from and/or being visited by STEM professionals
7. More opportunities to shape your own learning by focusing on things that you want to know about or do
8. Other (record other possibilities)
Let’s talk about getting inspired by STEM

Think about something that happened in a STEM-related class that made you feel inspired. Maybe you felt excited about your possible career choices, or what comes after school, or just generally inspired by the world and curious to find out more.

1. Describe what happened. What class was it? When and where did this happen? Who (if anyone) was involved?

2. Why did it make you feel inspired?

3. Are you doing anything differently because of what happened? If so, what?

4. What was the role of your teacher (if any)?

Thinking about your previous answers, as well as other experiences you’ve had, what do you think would make you more inspired in STEM-related classes or want to take more STEM related classes?

1. Technology in class
2. Hands-on and practical learning
3. Field trips
4. More information about STEM jobs and careers
5. Hearing stories from and/or being visited by STEM professionals (people who work in STEM related careers or use STEM in their jobs)
7. More opportunities to shape your own learning by focusing on things that you want to know about or do
8. Other (record other possibilities)
# Let’s wrap it up!

1. How interested are you in taking a general STEM course that would help you understand everyday life, but might not prepare you for a specific STEM career? In the course you may learn basics like: introductory anatomy so you better understand how your body and your health work, easy technical skills so that you can fix things around the house, coding for websites or math that will set you up for budgeting your business.

<table>
<thead>
<tr>
<th>Interest Level</th>
<th>Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all interested</td>
<td></td>
</tr>
<tr>
<td>somewhat interested</td>
<td></td>
</tr>
<tr>
<td>interested</td>
<td></td>
</tr>
<tr>
<td>very interested</td>
<td></td>
</tr>
<tr>
<td>extremely interested</td>
<td></td>
</tr>
</tbody>
</table>

2. Do you think there’s a better way to measure success in STEM related subjects that is different from how you are currently evaluated?

<table>
<thead>
<tr>
<th>Yes Votes</th>
<th>Non Votes</th>
</tr>
</thead>
</table>

3. In general, how inspired, hopeful or curious do you feel about STEM-related subjects today?

<table>
<thead>
<tr>
<th>Interest Level</th>
<th>Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all interested</td>
<td></td>
</tr>
<tr>
<td>somewhat interested</td>
<td></td>
</tr>
<tr>
<td>interested</td>
<td></td>
</tr>
<tr>
<td>very interested</td>
<td></td>
</tr>
<tr>
<td>extremely interested</td>
<td></td>
</tr>
</tbody>
</table>

Votes
NEXT STEPS

You did it! Thanks for taking the time to be a part of this conversation. Be proud that your voice is making a difference and helping build a bright future for Canada’s young people. Submit your conversation online at: canada2067.ca/youthvoice or mail your workbook to:
Canada2067 Research Team
H&K Strategies
55 Metcalfe St #1100
Ottawa ON K1P 6L5

WHAT HAPPENS NEXT:

If you and your students found this conversation and topic interesting, you can stay involved in a number of ways:

• Host another conversation (there are 3 subject areas). Details at: canada2067.ca/youthvoice

• Apply to join us at the Canada 2067 Conference, or live stream some events with your class: canada2067.ca/conference

• Suggest others have conversations and share hosting details with colleagues

HOW YOUR CONVERSATION WILL HELP CHANGE HAPPEN:

Gather ideas about STEM learning from: Students, Teachers, Parents, Government, Industry

Develop a vision and framework for innovation in STEM learning

Canada 2067 conference to share vision and launch initiatives to get there

People across Canada join together and make STEM accessible and relevant to all students

TALK ——— THINK ——— SHARE ——— DO