

Keeping Doors Open: Girls, STEM & Their Future Careers

What Girls Can Do



When it comes to STEM, we have a long way to go to balance the equation for girls' and women's participation. Girls continue to receive messages that STEM isn't for them and may be closing the door on STEM careers as early as Grade 8. As a result, girls could be limiting their career potential and pathways, particularly as the economy and workplace evolves. And as a society, we could be missing out on generations of future innovators and problem-solvers.

Girl Guides of Canada set out to explore what the pathways to STEM careers and skills look like for girls under 18, and how this relates to girls' preparedness for the future of work.

We learned that girls might be prematurely closing doors to STEM for three main reasons:

1. Girls continue to receive messages that STEM isn't for them. Influences from parents, peers, teachers, media, and society at large continue to subtly – and not so subtly – tell girls that they shouldn't (or can't) be interested or succeed in STEM subjects.

2. Girls may not be aware of the steps they need to take to open certain doors. In many cases, girls need to start making decisions as young as age 13 that can impact their ability to pursue STEM fields in the future. But they might not be equipped with enough information to make informed decisions at this early age.

3. Girls may not realize many of the doors even exist. There are a wide variety of STEM fields and entry points into those careers, many of which girls may not be aware of. We know that girls are often interested in careers that help people, make the world a better place, and that allow them to be creative, but often aren't aware this is possible through STEM.



WHAT CAN YOU DO?

How can you keep your options open and not prematurely close doors? There are steps girls can take to make informed and empowered choices for your future.

Keep your options open

- **Take math and science:** During course selection, keep your options open by taking math and science courses – and especially the more advanced courses, if you're in a province that has course streams. This doesn't mean you have to go into STEM, but if you decide you want to go down the line, the option will be there.
- **You don't need to have it all figured out:** It's okay if you don't know what programs you want to apply to, or what career path you want to pursue. If you keep your options open by taking a broad range of fundamental courses (including math and science), then lots of doors will be open to you when it's time to apply!
- **Think about skills:** Planning for the future doesn't have to mean focusing on a specific career or job. You can choose to focus on the types of skills you want to build and use.
- **Start at the end and plan back:** If you have an idea of the direction you want to head in, make sure your bases are covered by starting at the end and working backward. If you have an idea of the different post-secondary options you want open to you, look at the admission requirements and then work backward from there to figure out the courses you should take now.

Access resources and support

- **Ask for help:** There can be a lot to consider when you're making decisions about your future. Make an appointment with your guidance counsellor or ask a teacher or parent if they can help walk you through the course selection or post-secondary application process. If you're not sure about pre-requisites or admission criteria, see if they can help you navigate it.
- **Look for resources:** Look for informational websites and other resources to support your academic and career planning, so that you can make informed decisions. This could include college and university websites or your school board's website.



Get inspired by role models and mentors

- **See it, be it:** Put up posters and quotes from women who you look up to. Look for progressive media sources that showcase awesome women leaders. On social media, look for examples of girls and women you identify with and diverse role models who are excelling in their fields – and follow them for ongoing inspiration! Check out movies, books, and graphic novels about amazing women in STEM.
- **Career questions:** Talk to your parents and the other adults in your life about what they do at work or while volunteering. Ask them if they use any STEM skills in their jobs, how they help people, or the impact that their work has.

Be curious and open-minded

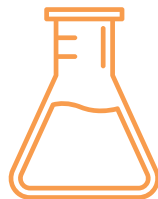
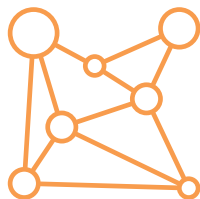
- **Ask “why” and “how”:** When you see a local community problem or world issue, be inquisitive and creative to think about how you would solve it (even if it’s just to daydream!). Try building things or taking things apart.
- **Look for STEM in everyday life:** STEM

touches our lives in lots of different ways. Looking at tech specifically, it goes beyond video games and computers – it impacts healthcare, music, transportation, politics, and so much more. Consider the ways the things you’re passionate about are touched by STEM and how you could pursue these passions.

- **Explore career options:** Browse a job posting website or career fair. What kind of jobs have you not heard of before? If they sound interesting, can you learn more about them? If your school offers co-op courses, this is a great place to start.
- **Join and explore:** Join clubs and extra-curricular activities that give you a chance to explore STEM-related activities and skills. Don’t want to commit long-term? Look for special events and competitions like hackathons.

Be aware

- **Keep stereotypes in check:** Be aware of how we all get messages about who’s good at STEM. Is this affecting your own attitudes towards STEM subjects? Question your friends or peers if you hear them repeating harmful stereotypes about STEM.



GIRL GUIDES OF CANADA

Girl Guides of Canada–Guides du Canada (GGC) empowers every girl in Guiding to discover herself and be everything she wants to be. In Guiding, girls from 5-17 meet with girls their own age in a safe, supportive and inclusive space to explore what matters to them. Guiding is where girls take the lead, put their ideas into action and jump into a range of empowering activities – all with the support of women mentors committed to positively impacting girls’ lives.

Girl Guides offers programming options ranging from cybersecurity activities and science experiments to exploring career options and discussions on feminism and gender inequality. We focus on equipping girls with twenty-first century skills that are transferrable to other areas of their life, such as building problem-solving skills through the engineering process, or hypothesizing through forensic-science inspired investigations. This programming is delivered in a safe, all-girl space that is designed to address the roadblocks and stigmas girls might encounter elsewhere in their lives. Girls in Guiding develop the skills to confidently navigate the world and grab hold of every opportunity that comes their way – now and in the future.

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Full report available online at girlguides.ca/girlsinSTEM

For inquiries, contact advocacy@girlguides.ca

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