



Girls to the Power of Math Program Outline

Written by Alexa Bailey, Founder
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About Us:

Vision: Our vision is that early confidence in math will inspire a love of math and encourage more women to enter STEM related fields.

Mission: We aim to give young girls confidence in their mathematical abilities, making a difference to close the gender gap in STEM!

Mentorship:

The mentors in this program are young women in high school and university who have a passion for math and who want to share it. Research has shown that mentorship is very important for keeping girls in STEM. A parent said “Please keep offering this kind of program! If it were a full year, we would do it. It’s not just the confidence that Girls to the Power of Math offers, the mentorship of smart, kind young women in secondary and post secondary is so valuable to girls at this age. Seeing role models weekly ... the value is incalculable.”

Who is eligible?

All girls* in Grade 3 capable of learning in a group setting. This is not a remedial program. The program is FREE and runs after school for 1 hour weekly, for 10 weeks. We encourage all girls to sign up regardless of math ability or confidence. Our goal is to boost confidence and reduce the anxiety around math. We would like to be as inclusive as possible but please note that our mentors are students themselves and are not trained in teaching students who have special needs. We invite students in need of accommodations to contact us directly and we will evaluate whether they are a fit with the program.

There is a maximum of 10 girls per group. We will fill places based on first come/first served basis. If there are more than 10 girls interested in the program, we would be happy to run another group in the next term. If the program is being hosted by an elementary school, only the children from that school are eligible to participate.

*While we use the term "girls" and "female-identifying", we invite non-binary students to apply as well.

Overview:

We offer a **free 10-week after-school** program that brings mentorship from high school girls to groups of female and non-binary identifying students in Grade 3 (or at the equivalent level) with the goal of increasing mathematics confidence . For every program, training, resource kits, and criminal record checks are provided by us; all we need is space, a teacher sponsor, some students, and your interest. Through using fun games, art, music and physical activity to teach skip counting and multiplication skills, we provide a unique approach to learning mathematics.

Background:

The program was developed out of research Alexa Bailey, Loran scholar, founder of G^AM, conducted with UBC professor Dr. Toni Schmader. The research showed that BC elementary school mathematic confidence disproportionately declines in female students, and not male students. We have been running since 2019, and have received multiple grants from the Society of Canadian Women in Science & Technology, and the Actuarial Foundation of Canada. We have run programs in the Vancouver, Ladner, Chilliwack, and Whistler school boards with prospects of more this coming term.

GOAL: To breach the gender gap in STEM.

Following current educational understandings, G^AM aims to be one outlet that provides the mentorship needed to retain female excellence in STEM fields. StatsCanada found that “among high school graduates, women are 29.8% less likely than men to enrol in a postsecondary STEM program shortly after graduation” ([Ching et al., 2021](#)). Our hope is to encourage a love of mathematics early in young girls’ lives that will continue into their adulthood.

What we need from you:

- Interest!
- Space + Dates/times the program can run at your school:
 - Preferably a gym/multipurpose room with space to run around) **for 1 hour after school every week for 10 weeks**
 - Space would preferably have a whiteboard for the mentors to use but not necessary.
 - Space to keep the kit of materials if possible
 - Please let us know well ahead of time if the room/space will be unavailable during any time the program is running (this includes student/teacher nights, elections etc).
- Teacher sponsor:
 - Does not have to be present, just in the school for insurance purposes, **(if possible, able to be present for the first session to give mentors feedback and tips on managing the group)**
 - Be able to watch over the kids during the interim between the end of school and the start of the program
 - If possible, able to connect with mentors to print out sheets for the program when necessary

- The teacher sponsor will be notified if there is any incident report and will be the key person with whom the Operation Manager communicates.
- Students:
 - Students are often referred by teachers to our program, teachers in the target grade to hand out flyers to ALL eligible students (there is no ability requirement!)

What we do for you:

- Find mentors
 - We contact nearby secondary school principals, career advisors, etc for students in the area who can run the program. We aim for 3-4 mentors per program. We have such a high ratio so that we can keep the program running in case one mentor is sick. We require a minimum of 2 mentors to run the program.
 - Supply box
 - Is given to the mentors before the start of the program
 - Training
 - Each mentor is interviewed for selection. We train the mentors to run the program. It must be noted that our mentors are high school students who volunteer and sometimes have little experience working with groups of kids. If they run into challenging behaviours, they create an incident report and this will be shared with the parents of the child/children as well as the teacher sponsor.
 - Criminal Record Checks
 - All mentors receive CRC before the start of the program
- Regular check-ins with Mentors and you

How to sign up?

Fill out this form and we will get back to you with the next steps! We look forward to working with you!

<https://docs.google.com/forms/d/1BtJbhLqVG40mbImNdNiuPlkgFT8Y6Tau12nPgPhOu9k/edit>