

CAGIS

CAGIS is a science club for girls aged 7-16 with the mission to promote, educate and support interest and confidence in science, technology, engineering, and mathematics (STEM) among girls. CAGIS chapter members, aged 7-16, meet monthly to explore STEM with fun, hands-on activities led by women and men specializing in many different fields. Chapter events, held on weekends or after school, last 1-2 hours, and occur at the workplace of the presenter, giving the girls a "behind-the-scenes" look at science and technology. They consist of a mini presentation introducing a STEM concept, followed by fun, hands-on activities to consolidate the learning and make science fun.

Past events have included:

- building and testing bridges in a wind tunnel
- sampling plant communities in forests and fields
- the physics of figure skating
- performing orthopedic surgery on rubber knees
- CSI and forensic science
- the physics of art restoration
- computer science and website development
- dentistry and searching for cavities
- mechanics and the internal combustion engine
- the chemistry of cosmetics
- flight and aviation, to name a few

Why CAGIS?

Enter any classroom across Canada, ask children to describe a scientist, and you will likely hear about brilliant, but crazy old men in lab coats and goggles doing dangerous experiments (the mad scientist). Stereotypes such as this, however, can affect an individual's likelihood to take science courses, and the attention he or she gives to the studies of the sciences. The Canadian Association for Girls In Science (CAGIS) attempts to break the scientist stereotype, and to facilitate interest and confidence in science, technology, engineering, and mathematics (STEM) by holding regular events with fun, hands-on activities led by women and men in STEM-related fields.

Many years of research throughout Canada and the United States has shown that girls begin science education at a disadvantage and fall behind in school, not because of lack of interest, but because of lack of exposure. A recent University of Michigan study found that giving girls hands-on science activities helped close the gap. The researchers recommended that teachers and parents encourage girls to participate in science clubs and fairs, because "girls tend to respond more favourably to co-operative, small group environments."