



# 2010 Record of Achievement

OCTOBER 16 • 2010

Presented by

The Ontario Network of  
Women in Engineering



ONWiE

# Engaging Girls Across Ontario in Engineering

Go ENG Girl/GÉNIales, les filles is an exciting opportunity for girls in grades 7-10 to visit their local University campus, meet with engineering students and professionals and directly engage in engineering projects. The province-wide program is coordinated through the Ontario Network of Women in Engineering (ONWiE) and has been an annual event since 2005. On October 16, 2010, Go ENG Girl/GÉNIales, les filles brought together 670 girls, 630 parents and guardians, and more than 250 volunteers and organizers at 11 locations across the province of Ontario. Close to 25% of the participants were attending for the second or third time.

The participants work with role models and peers through hands-on activities that encourage them to design, create, and innovate. Girls leave Go ENG Girl/GÉNIales, les filles with new ideas about the limitless possibilities they may design and create in their futures. In addition to their feelings of inspiration and empowerment, each participant left with a USB stick containing useful and current information about engineering in our everyday lives and programs at Ontario universities.

Next year's Go ENG Girl/GÉNIales, les filles will take place on October 1, 2011. Each year, ONWiE aims to reach out to more girls with the message that engineering is a creative process, and that math and science can help them solve problems worth solving. Watch for more information and registration for Go ENG Girl/GÉNIales, les filles 2011 at [www.ospe.on.ca/goenggirl](http://www.ospe.on.ca/goenggirl).

**“Our 2010 event was an overwhelming success - once again the design work showed amazing creativity and the energy and enthusiasm of the participants and volunteers was incredible.”**

Valerie Davidson, Chair of ONWiE and NSERC/RIM Chair for Women in Science and Engineering for Ontario

For more information about the **CWSE-ON** program, go to [www.cwse-on.ca](http://www.cwse-on.ca)

ONWiE's membership consists of representatives from fifteen Schools and Faculties of Engineering in Ontario. ONWiE works to support and promote the participation of women in engineering. Information about ONWiE is available online: [www.onwie.ca](http://www.onwie.ca)



While 47% of the Canadian labour force is female, women make up only 12.2% of the total engineering workforce (Statistics Canada 2006). In education, women comprise 17.4% of the undergraduate enrolment in accredited engineering programs and 21.5% at the post-graduate level (Engineers Canada, 2010).



# Designing, Creating & Solving Together

A key component of Go ENG Girl/GÉNIales, les filles is the hands-on activities that help girls experience the creativity, innovation and teamwork involved in engineering. Girls learn engineering concepts, use problem-solving skills and tackle real-world problems in small groups. Here are some of the design challenges they undertook:

- Energy at Work – Rollercoasters
- Wonderful Water Filters
- Purse Extractor Machine Design
- Fun with Bridges
- Waterproof that Roof
- Robocritters
- Egg Drop
- The Big Crane
- Snap Circuits Electrical Design
- Catapults
- Robot Day at the Park
- Float Your Boat
- Surprise... Activity
- The Mighty Inverted Tower
- Improve Your Device!
- Balloon Car
- Hydraulic machines



**“I applaud all of the girls for their interest in attending today ... perhaps you will be inspired to become an engineer and help to make our world an even better place to live.”**

Leona Dombrowsky  
Minister of Education





Approximately half of the students who attended Go ENG Girl/GÉNIales, les filles filled out a feedback form. Here's what they told us about the event:

**90%** of respondents felt the program was effective or very effective in meeting their expectations.

Their top **3** expectations

- Learn** more about **engineering**
- To **have fun!**
- Design** and **build** things

**2/3** Proportion of respondents who were more interested in engineering as a field of study or a career choice after participating in Go ENG Girl/GÉNIales, les filles.

**“Go ENG Girl! is an ideal opportunity to connect ... young women and future engineers of Ontario with role models and mentors in the engineering profession. Our society cannot reach its full potential until women have reached their extraordinary potential. ”**

Dalton McGuinty  
Premier of Ontario

## COMMENTS BY PARTICIPANTS

“I liked how we could build without too many guidelines. We could be creative.”

“It showed me that engineering wasn't just about cars and factories.”

“GEG changed my view of engineering from nerdy and boring to fun and interesting.”

“I learned that there are lots of choices and loads of opportunities.”

“GEG has made me want to be an engineer – I enjoyed talking to women who have succeeded at being an engineer.”

“On a appris que le génie n'est pas centré sur une seule chose.”

“Elle m'a intéressé à plus de choix en génie.”





## Feedback from Parents

Given that 82% of student respondents indicated they would consult with a parent or guardian when making choices about post-secondary education, parental involvement is a key aspect of Go ENG Girl/GÉniales, les filles. At each event location, parents were invited to join an informative panel discussion while their daughters worked separately on design challenges. Engineering faculty, alumnae, and students led the discussions about how an engineering degree can lead to rewarding careers involving working with people, social responsibility and creating designs that improve our quality of life.

89%

of parent respondents felt that Go ENG Girl/GÉniales, les filles was effective or very effective in meeting their expectations.

Parent respondents who plan on encouraging their daughters to pursue engineering:

73%

### COMMENTS BY PARENTS

"I most enjoyed meeting women who have followed through on their dreams."

"The volunteer students were very nice and shared their experience - good role models for our young girls."

"It has taken out some of the fear that engineering is so difficult to pursue ... I realize engineering is achievable and should be encouraged as an option for girls."

"I learned how much more there is for my daughter to choose from for the future."

"Today's event increased my awareness of engineering in our daily life."

"This program has motivated our daughter to work towards engineering at university."

"Très intéressante, riche et éducative."



## Exhibits

Participants and their parents were able to discover more about potential education and career paths by visiting interactive exhibits hosted by engineering student groups, organizations, employers, and campus clubs.

### PARTICIPATING EXHIBITORS INCLUDED:

Biomedical Engineering Society, Carleton University  
 Canadian Association for Girls in Science (CAGIS)  
 CBE Club – Production of Biodiesel from Micro Algae  
 Creative Encounters, University of Guelph  
 Deep River Science  
 Discovery Western & Summer Academy, University of Western Ontario  
 Engineering Canoe Team, University of Western Ontario  
 Engineering Science Quest (ESQ), University of Waterloo  
 Engineering Toboggan Team, University of Western Ontario  
 Engineers Without Borders  
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 University formula racing teams  
 University student engineering societies  
 UWAF (University of Waterloo Alternative Fuels Team)  
 Venture Summer Camp & Venture Girls Club, McMaster University  
 Waterloo Unlimited  
 WE Bots, University of Western Ontario  
 Women in Engineering  
 Women in Science and Engineering (WiSE)

## Media Interest

Go ENG Girl/GÉNIAles, les filles is advertised at both the provincial and the local levels through a variety of media including electronic, print and broadcasting. This year's event was publicized as part of National Science and Technology Week 2010, on Girl Guides Canada, IEEE-WiE, CWSE-ON and ONWiE websites, as well as a Girls4Science group on Facebook, raising awareness province-wide.

Many local and campus papers, alumni newsletters, and radio and television stations announced the event, including **91.5 The Beat** and **Dave FM** Community Events pages, **Radio Western/Fanshawe - 106.9 FM**, **Rogers Cable "Inside Guelph"**, **McMaster Daily News**, **University of Ottawa**, **Guelph Tribune** and **Guelph Mercury Online**, and the **UW Daily Bulletin**.

Some media representatives visited events and produced excellent coverage, including full articles printed in **The Record (Kitchener-Waterloo)** and the **Thunder Bay Chronicle-Journal**, as well as online articles in **Western News** and **UofT Engineering in the News**. Other highlights in the media this year were an MTV News program featuring WiSE and Go ENG Girl/GÉNIAles, les filles, and an interview with Dr. Valerie Davidson in **The Globe & Mail** newspaper, entitled "Why more women aren't becoming engineers."





# The People Behind Go ENG Girl/GÉNiales, les filles

ONWiE appreciates the outstanding efforts and continued contributions of our many dedicated volunteers who make Go ENG Girl/GÉNiales les filles come alive! Engineering students, faculty members, alumnae and staff are involved in all aspects of planning and leading activities, providing mentorship and helping out to ensure an unforgettable day for our many participants. Thank you!

## CARLETON

Katherine Newcombe, Melina Jefferson and Monique Frize

## GUELPH

Valerie Davidson, Melanie Veltman, Bethany Deyell and Justine Smith

## KINGSTON

Ana Popovic, Maegan Fell and Catharine Marsden

## LAKEHEAD

Heather Moynihan and Wa Gao

## LAURENTIAN

Brahim Chebbi and Lisa Renaud

## MCMASTER

Natalia Nikolova, Carm Vespi and Linda Coughlin

## OTTAWA

Sonia Clément, Scott Blurton, Mireille Gascon and Véronique Doucet

## TORONTO

Dawn Britton, Darlee Gerrard, Tamar Adourian, Ludmila Colcenco, Tara Egan Wu, Li-Lian Lui, Regina Lee, and Habiba Bougherara

## WATERLOO

Mary Wells, Stacey Scott, Rohini Wittke

## WESTERN

Cynthia Dunning, Lesley Mounteer, Jennifer Hinton

## WINDSOR

Edwin Tam, Katia Benoit, Mike Konstantino

Go ENG/Girl/GÉNiales, les filles is made possible by the support and participation of the Ontario Deans of Engineering:



# Thank you to Our Sponsors

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