



2012 RECORD OF ACHIEVEMENT OCTOBER 13, 2012

Presented by the Ontario Network of Women in Engineering

ONWIE



ENGAGING GIRLS ACROSS ONTARIO IN ENGINEERING

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The 8th annual Go ENG Girl/GÉNIales, les filles event was held on October 13th, 2012, 854 girls in grade 7-10 and their parents visited one of 14 university campuses to discover exciting, diverse and rewarding careers in engineering. This Ontario wide event was coordinated through ONWIE (Ontario Network of Women in Engineering) and has grown steadily since 2005 with the addition of new locations and higher attendance to engage a record breaking number of girls in hands-on engineering.

At each Go ENG Girl/GÉNIales, les filles location participants and their parents learned about engineering from female professionals, alumnae, current students, university advisors and professors from diverse engineering fields. Girls were given the opportunity to listen to the experiences, accomplishments, and advice of role models and given the chance to ask their own questions.

In addition, girls had opportunities to apply their engineering knowledge, design and problem solving through a hands-on activity with the help of current engineering undergraduate students. They also got to take home a USB stick full of information about engineering university programs and helpful links which contain more information about the profession.

Looking forward, the 9th annual Go ENG Girl/GÉNIales, les filles will take place on October 19th, 2013. ONWIE is hoping to build on the success of this year to reach out to more girls with the message that engineering is an exciting, hands-on and people-oriented field and that science and math have real-world applications worth exploring. Watch for more information on 2013 locations, activities and registration at www.ospe.on/goenggirl.

» 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.



"I liked the activity we did and how we had to use our creativity, imagination and brain power to construct."

- Participant

» 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 17.7% of undergraduate enrollment in accredited engineering programs and 21.7% at the post graduate level (Engineers Canada, 2011)

"Our 2012 event gave 854 girls the opportunity to learn about engineering careers in a friendly and fun environment. The girls loved the hands-on creative design activities, and they really enjoy working together to solve problems. Through events like Go ENG Girl/GÉNIales, les filles, ONWIE is helping build interest in engineering among young women."

- Mary Wells, Co-Chair Go ENG Girl/GÉNIales, les filles

DESIGNING, CREATING AND SOLVING TOGETHER

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The keystone of Go ENG Girl/GÉNIales, les filles is the opportunity it provides for girls to use their creativity, design and problem-solving skills in a hands-on application. With guidance from women and other girls who share their interest, participants are given engineering knowledge that they must use to complete a specific task. Some of the problems girls tackled this year were:

- » Creating a protective coating for a medical pill
- » Creating morse code machines from bread boards
- » Design and build roller coasters
- » Examining the building blocks/properties of coffee cups
- » Robotic and Hydraulic arms
- » Balsa wood bridges design and build
- » Single and double deck bridges
- » Laser tag, light and mirror maze
- » Build a Mars Landers
- » Construct a windmill
- » Build a mine hoist
- » Sort and test ore

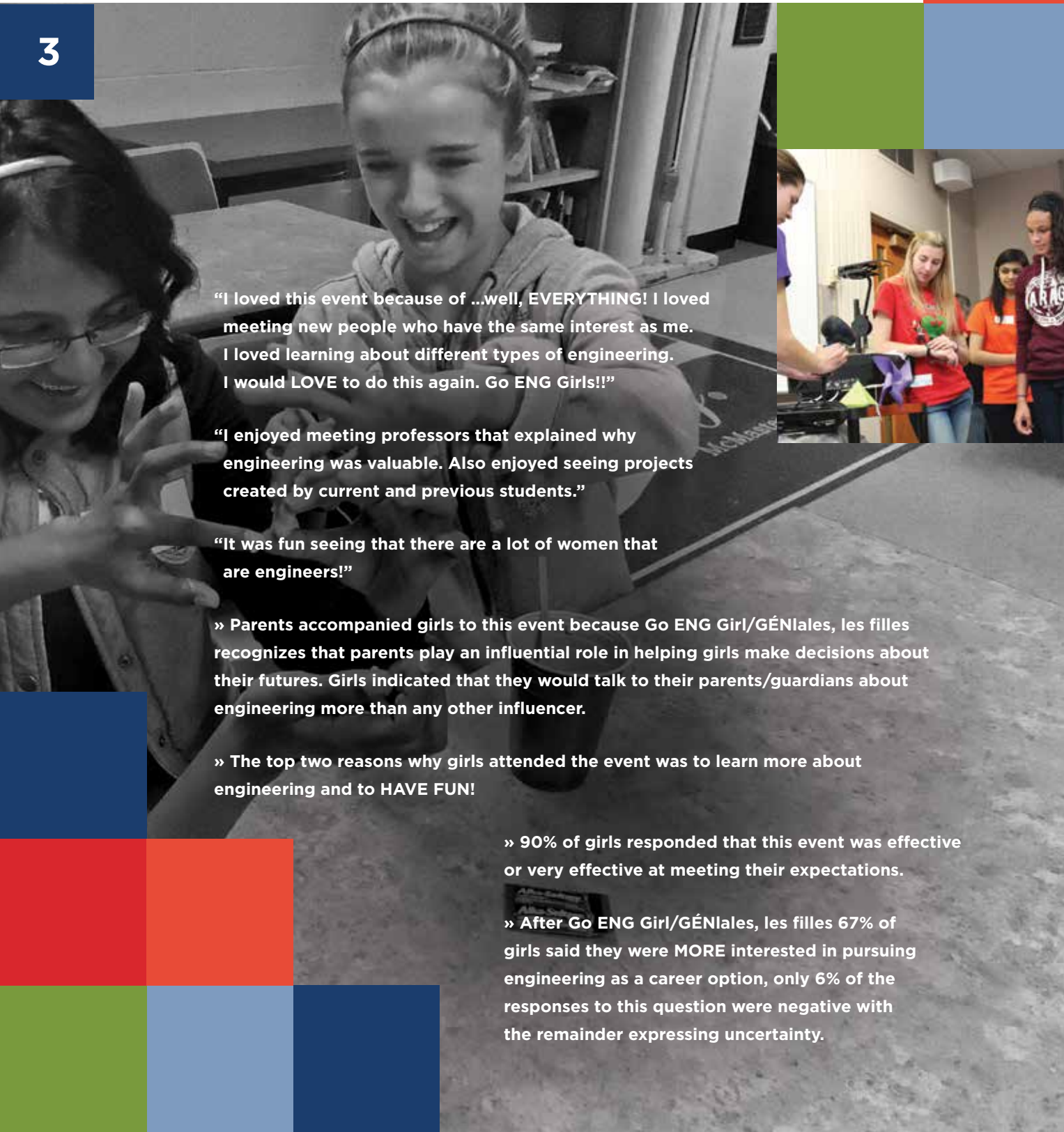


FEEDBACK FROM THE GIRLS

Here is what participants had to say about the 2012 event:

“What I liked most about today was doing the hands-on activity. What I have seen today is making me want to do computer engineering even more.”

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“I loved this event because of ...well, EVERYTHING! I loved meeting new people who have the same interest as me. I loved learning about different types of engineering. I would LOVE to do this again. Go ENG Girls!!”

“I enjoyed meeting professors that explained why engineering was valuable. Also enjoyed seeing projects created by current and previous students.”

“It was fun seeing that there are a lot of women that are engineers!”

» Parents accompanied girls to this event because Go ENG Girl/GÉNIales, les filles recognizes that parents play an influential role in helping girls make decisions about their futures. Girls indicated that they would talk to their parents/guardians about engineering more than any other influencer.

» The top two reasons why girls attended the event was to learn more about engineering and to HAVE FUN!

» 90% of girls responded that this event was effective or very effective at meeting their expectations.

» After Go ENG Girl/GÉNIales, les filles 67% of girls said they were MORE interested in pursuing engineering as a career option, only 6% of the responses to this question were negative with the remainder expressing uncertainty.

FEEDBACK FROM THE PARENTS

Parental involvement is a key component of Go ENG Girl/GÉNIales, les filles. This year 765 parents were engaged in panel discussions while their daughters completed the hands-on activity. Panelists represented the experiences of students, co-op advisors, faculty members, and alumni. Many parents indicated that the honesty and enthusiasm of these panelists helped them understand the diversity of engineering careers.

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» 94% of parents indicated that Go ENG Girl/GÉNIales, les filles was effective or very effective at meeting their expectations.

» 63% of parents indicated that they would encourage their girls to go into engineering, only 3% of the responses to this question were negative with the remainder expressing uncertainty.

“Before this event engineering was not a discussed option at our house. I now feel it is an area worth encouraging to my daughter. Keynote speaker was an excellent role model.”

“I was unaware of how broad the field is and all the opportunities under the engineering umbrella.”

“My daughter said this morning she is so glad we went to Go Eng Girl. This statement is very high praise coming from a 13-year-old who had to get up early on a Saturday! As a parent, I feel you did a fantastic job representing so many fields of engineering. I appreciated the honesty about workload and the co-op representative's assertion that co-op jobs are real jobs and are to be respected as such.”

EXHIBITS

A number of engineering organizations, student groups/clubs and employer shared their work with girls and their parents through exhibit booths. Participants had the opportunity to explore the diversity of engineering careers and connect with role models with similar interests.

PARTICIPATING EXHIBITORS INCLUDED:

- » Admissions and Recruitment, Ryerson
- » Local Engineering Societies
- » Engineering programs offered at the event locations
- » Engineering & Management, McMaster University
- » Venture Summer Camp/Venture Girls Club
- » LEAP Summer Camp
- » Aeronautics Team, University of Toronto
- » Blue Sky Solar Racing
- » Engineers Without Borders
- » Co-op Career Services, University of Waterloo
- » Engineering Science Quest/CATALYST
- » FIRST Robotics and Lego League
- » University of Waterloo Alternative Fuels Team
- » Shad Valley
- » Waterloo Unlimited
- » Baja SAE
- » Concrete Canoe/Concrete Toboggan, Western University
- » SunStang Solar Car
- » Formula Racing, Western University
- » Virtual Ventures
- » Biomedical Engineering Society, Carleton University
- » Robotic Guide Dog, Carleton University
- » Sustainable and Renewable Energy, Carleton University
- » Deep River Science Academy
- » IEEE, Carleton University
- » SAE Formula Team University of Windsor

MEDIA INTEREST

Go ENG Girl/GÉNIales, les filles is advertised through a variety of mediums at the provincial and local level including electronic, print and broadcasting. In 2012 this event was publicized provincially through the OSPE website and society notes, Canadian National Exhibition OSPE booth and in the Ontario Construction Report as well as locally through campus publications, local newspapers, television and radio.



THE PEOPLE BEHIND GO ENG GIRL/GÉNIales, LES FILLES

Go ENG Girl/GÉNIales, les filles is supported by a dedicated team of volunteers at each campus location. Teams are comprised of engineering students, faculty, staff and alumni who manage all aspects of the program. This year these dedicated individuals were joined by 275 volunteers who helped make this event as exciting and insightful as possible. Thank you!

Carleton University

Anthony Benedetti, Mawuena Torkornoo, Natalie Linklater, Daphne Ong

University of Guelph

Andrea Bradford, Jason Tyszka

Lakehead University

Heather Moynihan, Meilan Liu

Laurentian University

Donna Cortolezzis, Claudine Beausoleil

McMaster University

Carm Vespi, Linda Coughlin

University of Ottawa (English)

Université d'Ottawa (Français)

Nathalie Vallières, Valérie Samson, Frank Bouchard, Catherine Mavriplis

Queen's University

Corrine Hoas, Gillian Woodruff, Aphra Rogers

University of Ontario Institute of Technology (UOIT)

Marnie Ham, Min Dong, Adam Wu

Ryerson University

Martina Novacic, Liping Fang

University of Toronto

Tamar Adourian, Jen Leake, Janet Hunter, Darlee Gerrard, Owyn Notario

University of Waterloo

Mary Wells, Rohini Wittke, Martin Scherer, Mara Fontana

Western University

Lesley Mounteer, Clare Robinson, Jenna Robertson

University of Windsor

Edwin Tam, Katie Benoit, Shelly Scurr, Mike Konstantino

York University

Regina Lee, Richard Hornsey, Gayathry Wright, Lindsay Amyot, Patrick Hazzard

Mary Wells and Valerie Davidson,
Co-Chairs of the 2012 event.

GO ENG GIRL/GÉNIales, LES FILLES
IS MADE POSSIBLE BY THE SUPPORT
AND PARTICIPATION OF THE ONTARIO
DEANS OF ENGINEERING:



THANK YOU TO OUR SUPPORTERS

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- Science North



SATURDAY, OCTOBER 19TH, 2013
www.ospe.on.ca/goenggirl