

ONWiE Summit receives advice, inspiration from Maria Klawe

Bold dreams and first steps.

That's what Maria Klawe – one of North America's leading advocates for increasing the participation of women in the STEM fields – brought to the 2019 Ontario Network of Women in Engineering (ONWiE) summit in Hamilton.

Offering a combination of energetic inspiration and practical advice, Klawe kicked off a two-day conference that brought together nearly 100 women from across the province and beyond.

A leading computer scientist, Klawe has served as president of California's Harvey Mudd College since 2006, and helped the school reach gender parity among students in its computer science, engineering and physics departments.

Fifty per cent of the school's computer science faculty are also female, and Klawe said the college is turning its attention to improving opportunities for other underrepresented groups. Those achievements were the result of a number of small, replicable steps, she noted, using her keynote speech and workshop session to press the message that everyone can be a catalyst for change.

"I think the most important thing to understand about change that it often starts with something small," she said. "The thing everyone can do is talk about why it is absolutely essential to have more women in tech."





Changes at Harvey Mudd included remodelling the introductory computer science course, placing students together in sections based on previous coding experience, providing summer research opportunities for females, and taking groups of students to the Grace Hopper Celebration of Women in Computing conference.

Bringing together women from academia and industry, the ONWiE summit focused on ways to attract more females to study and work in engineering and technology fields. Klawe, clad in a t-shirt emblazoned with the slogan, "Educating the next generation of passionate problem solvers," said schools need to look at the design and delivery of courses to make them supportive and engaging to young women who want to make an impact on the world.

"Many women are more motivated to learn something because of what you can actually do in the world with it," she said.

She applauded programs like ONWiE's Go Eng Girl and Go Code Girl that are designed to spark interest in engineering and computer science among middle and high school students. Klawe also centred out the efforts of McMaster and Kim Jones, ONWiE chair and McMaster professor of chemical engineering, for raising the visibility of the gender gap in technical fields.

"This summit has been an amazing experience, and I am so proud of what has been done at McMaster and at ONWiE," she said.





Before a mixed audience at her keynote speech, Klawe urged men to help drive change by promoting the work of women and refusing to serve on all-male panels of experts.

"You need to know the leading women so you can promote them," she said. "Lean forward and support others in leaning forward."

A recipient of numerous prestigious awards for her leadership, Klawe was granted an honorary degree from McMaster in 2016.

Born in Toronto, she held faculty and leadership positions at the University of Toronto and the University of British Columbia before serving as Dean of the School of Engineering and Applied Science at Princeton University from 2003 to 2006.

