

Elizabeth Moses, ambassador for Build a Dream, in her day job at Windsor Mold.

BUILDERS AND DREAMERS

Build a Dream guides young women to careers in manufacturing, automation and STEM, while advocating for workplace diversity

BY KRISTINA URQUHART

hen Elizabeth Moses. machinist at Windsor Mold, arrived at St. Clair College in 2016 to the general machinist apprenticeship program, she was looking for a mentor who would help her to navigate the industry - one she had been disheartened about entering as a young female.

In high school, Moses discovered she liked to work with her hands after signing up for a woodworking course. A teacher recognized her aptitude for building and encouraged her to join the school's FIRST Robotics team. Over the next three years, Moses learned about opportunities in manufacturing automation and determined that she would pursue a career in the trades.

"A lot of people didn't believe I would be successful as a young woman," she

says. "The only person who was really encouraging was my teacher. And because of that reason - because he believed in me – I wanted to do it."

Moses now speaks to high schoolers as an ambassador for Build a Dream, a Windsor, Ontario-based non-profit that brings industry and educators together to inform female students and their parents about career pathways in traditionally male-dominated fields such as skilled trades, STEM, emergency response and entrepreneurship.

"When I saw young women, I wanted to make sure they heard the message: yes, I believe in you. Yes, you should believe in yourself. And yes, you are more than capable of doing this job," Moses says. "The support that I didn't have - I wanted to give it to them. Through Build a Dream, I was able to do that."

Addressing the skills gap

Moses, who graduated with her certificate of apprenticeship in 2019, steps away from Windsor Mold's factory

With the "We Can Do It" campaign, Canadian Manufacturers & Exporters is campaigning for companies to hire 100.000 more women into manufacturing by

floor several times a year to travel across Ontario on behalf of Build a Dream and promote the skilled trades at career information events. She met Nour Hachem-Fawaz, Build a Dream's founder, when she was recruited into St. Clair College's general machinist apprenticeship program, which Hachem-Fawaz was heading up at the time.

"[Elizabeth] is continuously trying to encourage more youth to go on this pathway," says Hachem-Fawaz. "If we really want to get more women into the skilled trades, and if we really want to encourage youth to consider this pathway, we need to have a youth leader [like her] to represent the trade."

Build a Dream's mission is two-fold: attracting more women to industry will bridge the skills shortage by tapping into a talent pipeline that is historically underused, and it will boost diversity and inclusion. In addition to the career expos, Build a Dream runs camps and workshops for both the classroom and workplace that aim to increase self-esteem and encourage teamwork while introducing young women to new technologies.

"Build a Dream starts the journey early," says Hachem-Fawaz. "If young women are making career-informed decisions, then they can lead their lives into high-paying jobs that are in demand and have security."

Hachem-Fawaz began her career helping women on the path to job security while working at Women's Enterprise Skills Training of Windsor (WEST), a non-profit committed to equipping women - particularly marginalized women and youth, who face more barriers in the workplace - with the training and employment tools they need to enter the workforce.

In 2012, recognizing an underrepresentation of women in the trades sector, WEST conducted more than 500 interviews and surveys to uncover what factors influence the career decisions of female students. "What we found was that young women still felt that certain jobs were very male-dominated, and they based their career decisions on where they saw themselves as females," says Hachem-Fawaz. "Gender was a huge factor."

Parents ranked highly on the list of influences, as did teachers and support staff. If a student's parent worked in the trades or emergency response, she had a higher likelihood of entering those industries herself.

Build a Dream is born

That early research into the role of parents in their daughters' career choices was the foundation of Build a Dream, which started as a one-off information event on STEM and trades roles at St. Clair College, presented by WEST, the University of Windsor, Workforce WindsorEssex and several local school boards.

The ability for parents to hear directly from industry and female leaders made the event a success, says Hachem-Fawaz. "Ultimately, when we talked to parents, what they really wanted was that security - that if their daughter went into a field a) there would be opportunity, b) she'd be accepted, and c) that it would lead to financial success for their child."

Hachem-Fawaz registered Build a Dream as a non-profit in 2017, and began holding events across Southern Ontario. The organization now hosts career information sessions in 10 Ontario cities, with over 10,000 attendees annually and more than 200 exhibiting companies. There are plans to expand the brand into Alberta this year.

"We're just one of the many touch points young women need," says Hachem-Fawaz. "[We] take the intimidating factors out and build their confidence, so that once they get to that significant decision - whether it's going to post-secondary, going into an apprenticeship or going straight into industry - they feel confident enough that they have the knowledge and the skill to pursue this opportunity."

Opportunities in manufacturing automation

With the Windsor-Essex region located in

Southern Ontario's manufacturing corridor, Build a Dream is well connected to industry and sees partners such as Linamar, Windsor Mold, CenterLine, Reko, and Laval Tool and Mold at its area events.

The organization has pledged its commitment to increasing female representation in the workplace as part of the Canadian Manufacturers & Exporters "We Can Do It" campaign promoting the Women in Manufacturing program, which advocates for industry to hire 100,000 more women by 2023. (Women currently comprise 28 per cent of the manufacturing workforce in Canada.)

At every Build a Dream event, a FIRST Robotics team showcases an automated application to demonstrate how STEM education is used in practice, and to help young women visualize themselves in tech-centric

Hachem-Fawaz has been working with FIRST Robotics since 2015, when she judged one of the organization's Windsor-area competitions. She noticed that while female students were indeed represented on the participating teams, they were only filling the marketing or business roles instead of the STEM-related ones.

So in 2017, along with long-time FIRST Robotics volunteer SheriLynn Koscielski, Hachem-Fawaz launched Windsor's first all-girls robotics team with a roster of female

Five tips to make your shop floor more inclusive

uring a diversity consultation, "we will never, ever tell a company, 'Change your qualifications. Or, change the way you assess," says Nour Hachem-Fawaz, founder and president of Build a Dream and the Workforce Innovators Network (see p. 14). "What we say is, 'Change the lens that you look through for assessing.' Or we encourage a different approach in trying to recruit certain candidates."

True transformation usually requires the help of a dedicated diversity or HR officer. but here Hachem-Fawaz shares some quick tips on how to increase inclusivity on the shop floor.

1. Consider the language of your company policies.

One client asked Hachem-Fawaz if they should implement a policy for women who needed to start their shift late because of daycare drop-off hours. "You need to have a family policy," she says. "Childcare is not a women's issue – it's a family barrier, because both men and women will put their child in daycare."

2. Review your public-facing assets.

Hachem-Fawaz says she often hears from women that have trouble picturing themselves in STEM or trades roles. Start by auditing the images on your website. "If they're all [pictures of] men, and then I look at the management team and it's all men, and I look at your board of directors and it's all men, then I'm automatically not going to see myself reflected in your industry," she explains. "So [as a female candidate] I'm likely not going to apply."

3. Evaluate your recruitment methods.

If you've used the same network for years to recruit for jobs, it's time to get out of your comfort zone, Hachem-Fawaz says. "If you're asking the shop floor, which is predominantly men, to recommend people, you're likely not going to get a female recommendation." Try a recruitment agency, or post on industry groups on LinkedIn - and review that job posting for inclusive language.

4. Build industry partnerships.

Take stock of all of your partners - and if you don't have any, start thinking about recruitment agencies, colleges with vocational training, universities with engineering programs, or government-funded programs for women in career apprenticeship.

5. Forgive yourself, and learn along the wav.

Hachem-Fawaz says that in most cases, companies are not exclusive to women on purpose. "It's an unconscious gender bias. You don't know what you don't know," she says. When Build a Dream works with corporate clients on creating diversity policies, management is usually keen to understand how they can improve workplace culture and in turn operational performance by diversifying their workforce. "They're very sincere in wanting that support, so that they can begin to transform therein."



Elizabeth Moses (third from right), general machinist at Windsor Mold, is joined by other women in emergency response, STEM and entrepreneurship at a Build a Dream event in Windsor, Ontario.

mentors. "I [thought] that's what it's really going to take to get more women to see themselves in the actual building and designing of the robot," she says. The team, called the Builda-Dream Amazon Warriors, has since enjoyed considerable success - they advanced to the FIRST Robotics World Championships the following year and continue to compete.

Other initiatives in the Windsor-Essex region are popping up to draw more women into manufacturing. In late 2019, Automate Canada, the industrial automation arm of The Canadian Association of Mold Makers (CAMM), announced a partnership with WETech Alliance, the region's entrepreneurship accelerator, to launch the Innovation Catalyst Cohort. For the next four years, the program will bring women working in industrial automation together for six-month stints to solve real-life business challenges.

The innovation program is supported by the Windsor-Essex Economic Development Corporation, which in August 2019 received \$692,000 from the federal government to assist female entrepreneurs in scaling their businesses in "emerging technology sectors" (such as automation and automotive), in an effort to boost the number of women-owned SMEs in Canada up from 16 per cent.

Hachem-Fawaz's mother was one such entrepreneur, who re-entered the workforce to sell automotive parts to the aftermarket after 18 years of caring for her children. "When my mom first went into the workforce, she had never finished high school," says Hachem-Fawaz. "I saw how she persevered through all her challenges, and then entered an industry that was very male-dominated."

Seeing her mother's story reflected

in the women she has encountered throughout her career is what Hachem-Fawaz says drives her work with Build a Dream.

"I made it my commitment and purpose to really break down those barriers for women, because I feel that financial independence not only builds economies and builds families, but allows women to have the power of choice," she says. "To have power in your own choices for your future is so key to living a successful, prosperous, healthy life."

Diversity and inclusion: the bigger picture

In 2014, while working at Women's Enterprise Skills Training of Windsor, Hachem-Fawaz helped to secure a government grant for a program at St. Clair College that would train women as industrial mechanics and millwrights for work placements that could lead to permanent roles.

She started working at the college full time to manage the training program and, while soliciting companies to participate, found manufacturers were interested in the program because it would provide them fully trained apprentices at no cost. Several told her they would hire more women, as long as they had the correct skills and training for the job. In practice, Hachem-Fawaz found that wasn't always the case.

After coordinating training for 25 women, who spent 18 weeks on the shop floor with college instructors to prepare for a 12-week paid placement, Hachem-Fawaz approached the same employers. "And then some of the excuses started coming up," she says. Some said they didn't have female washroom facilities, expressing trepidation about how a female on the shop floor might affect existing policies and procedures.

"They started asking some really tough questions, but they were questions that I think are very important for us to address because they're not the only ones thinking about it," she says. "What if she goes on maternity leave?" Or, you know, 'Childcare doesn't start till 8:30; my shift starts at seven.' How do I overcome these barriers in getting more women into industry?"

Overhauling policy

The challenge, Hachem-Fawaz found, was that small- and medium-sized companies often don't have a human resources department to handle such policy changes. "For them to say, 'Okay, I'm going to drop everything I'm doing and now focus on diversity and inclusion while trying to meet my bottom line' is going to be very difficult," she says.

As a result, she became a de facto diversity officer, working with the companies participating in the placement program to appropriately onboard their new female employees and to develop diversity and inclusion plans for future hires.

Now, with Build a Dream, Hachem-Fawaz is continuing the diversity work. In October 2019, the organization launched the Workforce Innovators Network, a platform offering speakers, workshops and business consultations to assist companies in creating inclusive practices for talent management.

"We really wanted to - through a grassroots initiative - address the underlying barriers facing women in work, and how we define women in the workplace," says Hachem-Fawaz of Build a Dream's expansion. "If you're saying you want to tap into the other 50 per cent [of the talent pipeline], your approach must change of how you traditionally do recruitment or advancement in your own industry."

Some of that legwork should be the responsibility of government agencies, she says, through the funding of awareness campaigns on both of the issues that drive Build a Dream: attracting more women to industry, and helping companies to diversify their workforce.

"We're beginning to see a shift," she says. "[D&I] needs to be embedded into companies' organizational culture, from recruitment, to HR, to retention.

"Advancing women in the industry is going to really be key to growing." | MA



Women comprise 28 per cent of the manufacturing workforce in Canada.