

Thank you to our women scientists and engineers - they make us better



When you think of an engineer, a scientist, or an electrician, what comes to mind? Or more pointedly, who comes to mind? I'm guessing it'll be a person in a white suit, a person with a wrench or a person with a wire cutter. Of course, the gender is always a man. This is the gender we often associate with jobs that are science, technology, engineering, or mathematics (STEM) related.

But both reality and history don't bear this out. Women have always played a fundamental role in science and technology. Consider Marie Curie, who was fundamental to the discovery of radiation, or South Africa's own Tebello Nyokong, a chemist who has been named amongst the most influential women in science and technology throughout Africa.

Today, there are millions of women working in science and technology-related jobs. And this isn't a surprise, at least to me. Women love science. They regularly outperform male students in exams in STEM subjects. In 2019, the United Nations (UN) released data showing that 68% of female students achieved top grades in math and science exams taken at age 16, compared to 65% of boys.

But why does this matter? I want to borrow the words of my colleague Angel Myeza, Vice President Field Services for Anglophone Africa, Schneider Electric: "Diversity makes us a better company; it helps us understand issues from perspectives we haven't considered before. And we're more creative as a result." Myeza is a qualified mechatronics engineer who found her interest in STEM after a high school career expo and wanted to both study and explore a career in engineering.

Having more women in the engineering sector will benefit us all. It'll make us all better. So, how can we encourage more girls to enter the industry?

The challenge we have is perception. And confidence. There's too many female youth who don't pursue a career in STEM-related subjects because they don't think it's right for them. To quote Myeza: "Exposing young women to technology careers is invaluable in encouraging more women into the industry. When

technology-related career opportunities come up, women are not first to mind. We typically take up softer, supportive roles, and we have accepted this stereotype. I see too many female colleagues second guessing themselves, downplaying their perspectives and expertise, where in fact this should be celebrated.”

We must give young girls the belief that they can excel in this space. And when they do, we need to celebrate their success and encourage them to take a next step. It’s incumbent on us to cheer on our young girls, point out their abilities, and help them gain confidence in what they can achieve.

But that’s not enough. We need women role models; successful women scientists and engineers that our girls can look up to admire and want to emulate. Women like Myeza are the best examples I can think of. They’ve overcome challenges, they’re now in executive roles, and yet they’re from here, from home. And we need to ensure the media gives them a spotlight, so our young girls can find the role models who will inspire our female youth.

I consider myself so lucky to be working with so many incredible women in STEM careers. We need more people like Myeza in the industry, both to show how much better we can be as well as to inspire the next generation of female engineers. I want to say thank you to all those women and girls who excel in STEM industries - you make us all better. Let us all encourage our girls, the next generation of women engineers, and remind them every single day that science can be their passion and future too.