Numbers GAME

As the co-founder and CEO of Actua, **JENNIFER FLANAGAN**—a recent recipient of Veuve Clicquot's Bold Woman Award—has devoted more than two decades to fighting gender inequity in STEM.

By LESA HANNAH

WHEN JENNIFER FLANAGAN saw that one of her favourite Canadian jewellery brands had created a campaign around "girl math"—the internet trend that makes fun of women's justifications for reckless and irresponsible spending by insinuating that we don't understand numbers—she sent the two women founders a letter expressing her disappointment. "I said, 'I have so many of your pieces, and the success of your whole business is because of amazing girl math,'" she says. Given that Flanagan has spent the better part of her career advocating for equality and inclusion in STEM, it's no wonder this sets her off; it perpetuates some of the internalized messaging she's been trying to counter.

That's just one aspect of her job at Actua, an Ottawa-based youth-outreach organization that works with schools, universities and colleges across Canada to engage with youth ages six to 26 who are involved in STEM—specifically, girls as well as Indigenous and Black youth and those in communities challenged by social economics. We spoke to Flanagan, who received Veuve Clicquot's Bold Woman Award in 2023 in recognition of her work as a female entrepreneur, about her career path, why equity in STEM matters and what needs to change to get young women to engage with it.

What drew you to this kind of work? "In my first year at the University of New Brunswick as an undergraduate, I saw a poster on the wall that said 'Do you want to start a science camp with me?' So I showed up at the meeting, and that changed everything for me. That first summer, I went to remote rural communities that were struggling socio-economically. I was in classrooms with boys and girls, so I saw all of the inequities, all of the lack of inclusion, all of the stereotypes. I was working with massive numbers of girls who just did not believe that science was for girls. That entire summer was just a huge 'aha' moment. My intention had been to go to medical school after my undergrad, and this just changed my path completely."

Why are girls not engaging with STEM? "Boys are encouraged to build things, to take things apart, to be innovative. They're encouraged to create, while girls are encouraged to nurture, to be careful, to be silent. So we're countering some pretty early internalized messaging. And girls often don't have the same kind of role models. If you don't have anyone to look up to, it's hard to imagine yourself in those fields. But I do think that so much of [that early messaging] is reinforced in every possible way. If girls are not good at math, they get super discouraged and they just believe that they were born not good at math. For a long time, even in the early days of working at Actua, it was like, 'Okay, how do we get girls to be a little different so they can fit into science or engineering and get different skills?' And now we try to flip that so that the system works better for women and welcomes their talents."

Why does diversity in STEM matter? "It makes a lot of sense that if we have diverse life experiences and perspectives, we're going to have better solutions. That's been demonstrated time and time again. Innovation is richer, decisions are better and bottom lines are higher when there is diversity in all areas, from leadership to people working on the ground. And we know that makes for better science. For example, most health-care research was done by men on men or on male rats. That meant that some medicine, engineering and design work has been not only 'not as good' for women but also sometimes even harmful to us. And if you look at a topic like AI, it's underpinning every single area of our life. If that continues to be solely designed by middle-aged white men, then we're going to live in a world designed by middle-aged white men. And that is not good for anyone—not even them." ■

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