

Building Diverse Workplace Cultures: Engineering at UBC - A Case Study

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Abstract

A recent study analysing more than 1200 papers about gender disparities in STEM concluded that "masculine cultures" are the main reason for the imbalance in engineering, computer science and physics. Other fields like chemistry, math and the life sciences have similar disparities. It's not that women prefer other fields; it's that they suspect they won't feel welcome in these particular ones. Until women feel that STEM fields are places where they can fit in and succeed as readily as men, it's not likely they'll choose them over more welcoming options.

We need a culture change - in our educational institutions, our communities and our workplaces. If we want to have diversity in STEM, parents and teachers need to change the dialogue by encouraging girls to engage in STEM-related experiences. And we need to build a diversity culture in the universities where students are educated and in the companies in which they go to work.

This kind of change is easier said than done. If leadership is not intentional about cultural change, nothing will happen. Saying you value diversity but not making fundamental change is like saying you want to lose weight without changing your diet and getting off the couch. It simply won't work. So what can we do?

At the University of British Columbia, we increased female enrolment in first-year engineering programs by 60% between 2010 and 2014. How? By inviting them in. After participating in workshops, presentations, tours and mentorships they discovered that the programs were more inclusive and exciting than they might previously have assumed. They saw it was a culture in which they would belong. And we did not stop there, between 2014 and 2017 we increased the number of women assistant professors in engineering from 20% to 40%. We did this through a strategic and intentional process of setting goals, defining policies and taking actions.

These actions signal not only that the organisation values diversity and inclusiveness, but that STEM fields more generally are places where women can thrive. We need the best, brightest and the most diverse group of people contributing to science and engineering solutions to address some of the most challenging problems on the planet. Let's commit to creating an environment where all those talented minds can thrive.