

## Women still face traditional barriers in technology fields

Over the past few decades, women have made significant advances in university participation. According to Statistics Canada, the proportion of women aged 25 to 64 with a university certificate or degree grew at a faster pace than that of men, more than doubling from 15% in 1991 to 35% in 2015. In comparison, the proportion of men with a university certificate or degree increased from 19% to 30% over the same period.

Women's educational participation rate also increased for program areas that had previously been more populated by men. One area, however, remains male-dominated is science, technology, engineering and mathematical (STEM) degrees. If women choose to enter in STEM, most do so in biology or science programs, resulting in even fewer women in engineering, computer science and mathematics programs. These choices have consequences, as fields of study such as engineering and computer science lead, on average, to better outcomes in the labour market in terms of employment and income.

For some, aptitude for a particular subject is a factor in university program choice; but traditional barriers still exist in enrolment trends. For example, young women with a high level of mathematical ability are significantly less likely to enter STEM fields than young men, even young men with a lower level of mathematical ability. This suggests that the gender gap in STEM-related programs is due to other sociological factors.

Today, however, a young female child may now see advertisements that promote women in STEM type of roles and occupations. Social media display images of women in technology fields other than just the traditional 'pink' jobs. Career options are opening up for women today.

A way to promote social change and increase the numbers of younger women to pursue STEM type for occupations is by developing new educational programs to improve the number of young female students to be involved in STEM activities. For example, STEM Mind Centres are now located in a neighbourhoods today. As well as a source of entertainment and recreational places; they become to be agents of socialization for children.

These centres promote STEM programs for boys and girl, such as coding, computers, 3D printers, robotics, digital media, photography and more. The management networks with schools and other youth centres to offer after-school activities and lessons in science and technology.

In a generation, the face of the post-secondary classroom may well change; more female students may choose STEM type of programs as a career.

Jim Jackson  
Aurora