Underrepresented Group Feature - Caroline Glenn

Women in STEM

Careers in science, technology, engineering and math fields have typically been dominated by males in the past. According to the American Association of University Women, approximately two-thirds of college students that major in a STEM field are men.

The imbalance in this proportion of STEM majors is partially a result of the imbalance of women that work in STEM careers. Since there are less women in the field that younger students can look towards as mentors, it is difficult for many women to feel encouraged to join the field. However, many universities, including the Massachusetts Institute of Technology, are working to ensure that women who work in STEM fields of the education department are visible to students. This is an effort to provide female students with professionals they can find similarities with and ask for advice as they explore STEM subjects and careers.

Dr. Genevieve Carlton, a faculty member at the University of Chicago, also states that there are less women in STEM due to the gender bias that is present in these fields and in early education. Carlton references a study performed by the American Psychological Association about the relevance of a stereotype-threat in early education. In this study, the stereotype-threat showed that males were stereotyped to have higher performance in math, which triggered self-doubt in many young female students. Carlton reports that the effects of this stereotype in education causes many young women to “abandon their STEM ambitions,” and shape their career ambitions.

Another contributor to the fewer percentage of women in STEM fields are due to wage gaps between men and women. The Pew Research Center reported that in 2018, the average salary of a man working in a STEM job was 40% higher than a woman working in the same, or similar position. This variance makes STEM jobs less desirable to many women. This research tied to wage gaps also references the aforementioned influences of early education stereotypes on young female students and how it contributes to unequal pay.

Many institutions, including MIT, are not only implementing changes, but are also raising awareness about this variance in order to lessen the gap between the number of men and women in STEM. Overall, STEM companies are trying to increase the diversity of their workers and researchers to create more equitable work environments.