Standing Up to Gender Bias in STEM

*SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH*

Women make up 70% of university graduates in Canada overall... but comprise just 30% of those in STEM programs.  

Gender bias is part of the reason behind the low numbers of women in STEM fields. Deep-rooted practices can have powerful influence. Ingrained beliefs and behaviours can promote negative ideas about women's abilities in STEM – even among women!

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Women are as interested and talented in STEM as men. So, what can explain the persistent lack of women in STEM?

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People respond to assertive women in different ways:

She's strong and competent!

She's bossy, I don't like her.

Support women who challenge injustice. Don’t accept gender stereotypes that tell women to be agreeable and not confrontational.

Confronting Bias

Women who confront bias might experience negative consequences because some people think that women are outsiders in STEM, and that they shouldn’t be confrontational.

Everyone benefits when we have greater participation in STEM.

Empowering change

Confront bias in STEM through education rather than anger. Turning confrontation into a positive experience will help women increase their representation in STEM and reduce future bias.

Diverse perspectives can increase the number and variety of solutions to problems.

Careers in STEM can pay more—so by promoting women in STEM, we might also reduce gender-wage inequalities.

Together, we can work towards greater equity in STEM by standing up to bias.

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DISCUSSION QUESTIONS:

1. How can we encourage people to stand up to gender bias in STEM and society?

2. How might confronting gender bias in STEM have different consequences depending on: a) the social location* of the person confronting? b) the social location of those observing the confrontation?

3. Why might people be apprehensive about standing up to bias in STEM? What are the potential challenges of confrontation, and the potential benefits?

4. What does confrontation look like? How can we prepare for situations in which confrontation may occur to minimize negative impact and maximize benefit?

5. What is it like to be confronted? What is it like to confront someone else? Is it possible for those confronting and those who are confronted to experience similar thoughts, feelings, or attitudes?

*Social location refers to where a person identifies themselves in terms of different identities including gender, race, sex, sexual orientation, religion, ability, or economic standing etc.

REFERENCES:

1. While we use the term STEM, current research shows that there is a great deal of variability in gender imbalance across disciplines – for example, biology and life sciences have greater balance than engineering or physics/computer science [https://www.nserc-crsng.gc.ca/_doc/Reports-Rapports/WISE2017_e.pdf].
3. Hyde et al., 2008; Stoet & Geary, 2018.