

Tackling sexism and gender bias in academic environments

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Learning Objectives

By the end of this workshop, you will be able to:

- Describe the effects of gender bias on women, gender non-conforming, and non-binary individuals
- Identify sexism and gender bias in their many forms
- Apply a range of strategies to create and promote a more inclusive classroom environment

Before We Start...

This workshop is a safe space:

- there are no "wrong" answers
- there are no "stupid" questions

We are all here to learn about a difficult topic - let's cooperate and respect each other



Brainstorming Activity

What comes to mind? What does it mean to you? What might it look like in an academic context? Is there an experience you would like to share?

Discuss in pairs and be prepared to share with the group

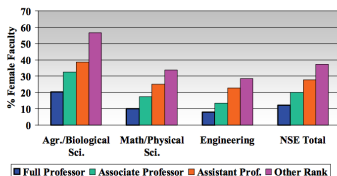
Sexism and gender bias

Sexism has negative emotional and academic effects on women

- Many women first experience sexism in early childhood, where parents and teachers tend to have different expectations and biases towards female versus male students (Gunderson et al., 2012)
- Participants in a study reported an average of 2.8 instances of sexism or gender bias per day, with the majority of events reported by women (Brinkman & Rickhard, 2009)
- Facing sexism can result in negative academic outcomes and in a reduction in the satisfaction of academic pursuits (Brinkman & Rickhard, 2009; Bradley-Geist et al., 2015; Logel et al., 2009; Morris & Daniel, 2008)

Women are underrepresented within many academic disciplines, particularly within science, technology, engineering and mathematics (STEM).

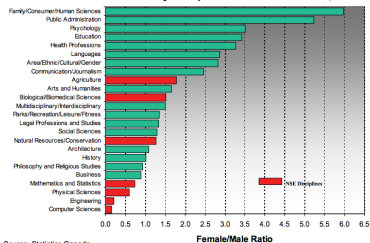
Percentage of Female Faculty in the Natural Sciences and Engineering as a % of Total NSE Faculty by Discipline and Rank, 2008-09



Source: Statistics Canada.

The Gender Gap

Full-time Bachelor's Enrolment by Discipline – Female/Male Ratio, 2008-09



Source: Statistics Canada.

This underrepresentation tends to increase throughout one's career (NSERC, 2010).

Identifying Gender Bias

We will focus on three areas:

- 1 Curricular bias
- 2 Classroom dynamics (student-teacher interactions)
- 3 Student-student interactions

Identifying Sexism

Curricular Bias

Things to look for and remedy in course materials and in the classroom environment:

- 1 Invisibility
- 2 Stereotyping
- 3 Fragmentation and Isolation
- 4 Linguistic Bias
- 5 Cosmetic Bias
- 6 Imbalance and Selectivity
- 7 Unreality

Forms of Curricular Bias

Invisibility and Stereotyping

Invisibility: Minimal or non-existence of certain groups in materials



Stereotyping: Assigning a set of characteristics to all members of a group

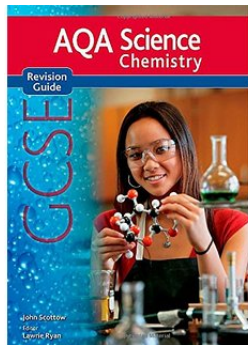
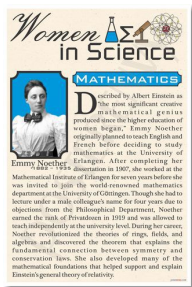
Forms of Curricular Bias

Fragmentation and Isolation, Linguistic Bias, and

Cosmetic Bias

Cosmetic Bias: Superficial inclusion masking bias

Fragmentation and Isolation: Special inserts or chapters highlighting certain topics which present these as peripheral, less important to the main narrative



Linguistic Bias: Exclusive use of masculine terms and pronouns

Curricular Bias Activity

Examine the course materials provided.

- What forms (if any) of curricular bias do you notice?
- How might you improve things?
- What forms of curricular bias might be more prevalent in your discipline?

Identifying Sexism

Classroom Dynamics

Studies show that instructors tend to:

- Call on male students more often
- Ask male students higher-order questions
- Provide more coaching and feedback to male students
- Wait longer for male students to answer questions

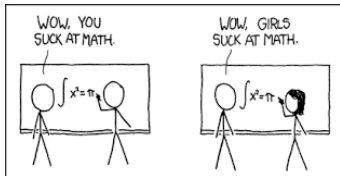
Female students are less likely to:

- Raise their hands immediately in response to questions
- Receive feedback, whether praise, help, or criticism
- Have their comments credited, developed, adopted, or even remembered by the group

(Morris & Daniel, 2008; CTE University of Virginia)

Math-related gender stereotypes

Exposure to math stereotypes has been shown to affect women's performance on tests and interest in STEM-related careers (Shapiro & Williams, 2012)



A study on confronting math stereotypes in the classroom found that (Boysen, 2013):

- The teacher was perceived more positively when they confronted rather than ignored the stereotype
- Confrontation resulted in a reduction of students' self-reported sexism

Confronting Sexism Activity

In small groups, examine the scenario provided and discuss how you could respond to the situation if you were the instructor of the course. Be prepared to share your group's answers.

Some Guidelines

Confront the behaviour, not the person and frame as a teachable moment, not a scolding session

Discuss how staying silent can contribute to the problem

Rather than telling students to suppress stereotypical thinking, encourage them to think critically about how stereotypes and biases arise.

Summary

Recall our learning goals:

- Describe the effects of gender bias on female students
- Identify sexism and gender bias in their many forms
- Apply a range of strategies to create and promote a more inclusive classroom environment

The strategies provided can be used to create a more inclusive classroom environment for *all* students at *all* academic levels

Warming the Chilly Climate

Suggestions from the literature:

- Education and (self-)awareness
- Feedback on teaching from students and colleagues
- Collaborative learning environment (group work, activities)
- Give all students equal attention (as much as possible)
- Try to encourage all students to participate in class discussions and establish ground rules for discourse
- Move around the classroom
- Provide guidance, not answers
- Ensure that all students practise hands-on skills
- Incorporate contributions of female leaders into the curriculum
- Make mentors and role models available to students

Resources I



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Resources II



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Resources III



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Resources V



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