



WISEST

Equity, Diversity and Inclusion (EDI)

Toolkit for Teachers

www.uab.ca/WISEST



Women in Scholarship, Engineering, Science and Technology, breaking barriers and promoting diversity in STEM
www.uab.ca/WISEST | wisest@ualberta.ca | 780-492-7774



The Importance of EDI.....	3
Professional Development for Teachers.....	4
Classroom Resources.....	5
Lesson plans.....	5
In-class activities.....	5
Books.....	6
Inspiring Examples of EDI in Action.....	7

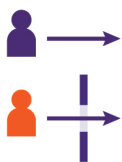
The Importance of Equity, Diversity and Inclusion (EDI)

EDI Defined



Equity

Removing barriers, biases, and obstacles that impede equal access and opportunity to succeed.



Diversity

Ensuring the presence of difference, be it race, gender, socioeconomic status, sexual orientation, religion, ethnicity, mental or physical abilities, etc..



Inclusion

Creating an environment that makes people feel safe and valued for who they are and recognizes the contributions of everyone.

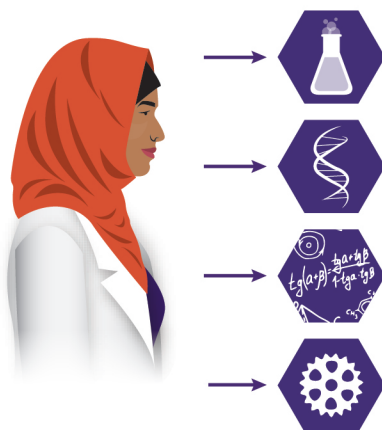


EDI in STEM

Creates opportunities for everyone to find their fit



Provides access to careers



Allows us to ask better questions



[Back to Table of Contents](#)

"The likelihood of a girl enrolled in grade 1 in Canada going on to receive a PhD in the sciences or engineering is approximately 1 in 225." - WISE report 2017

"Teams with a minimum of 2-3 (ideally diverse) women decrease groupthink."



Professional Development for Teachers

This section provides background information about underrepresentation in STEM fields and provides context on why moving towards a more inclusive field is both valuable and necessary.

[Historical Comparison of Gender Inequality in Scientific Careers Across Countries and Discipline](#)

Peer-Reviewed Paper | Gender inequality

This paper discusses the gender inequality in academia despite the increase of women academics in the past 60 years.

[The STEM Gap: Women and Girls in Science, Technology, Engineering, and Math](#)

Report | Gender inequality

This report breaks down the STEM gap and provides comprehensive resources with accompanying statistics from studies conducted to capture the disparity

[The Gender/Resource Gap](#)

Article | Gender inequality

This article discusses the gender gap in research and how women are less likely to receive financial support from the universities, which makes them less likely to publish research.

[I Thought I Knew What School Was Like For My Students of Colour](#)

Article with Resources | Racism

The author shares their experience as a teacher becoming aware of how their own teaching practices unintentionally cause harm to students and how they are now using it to provide perspective on ways we can do better.



Classroom Resources

This section provides teachers with resources including lesson plans, in-class activities, and books that promote and encourage Equity, Diversity and Inclusion.

Lesson Plans

Teaching Tolerance

Lesson Plan | Racism | Gender & Sexuality | Homophobia | Stereotypes

A variety of EDI resources such as film kits, lesson plans, student tasks and teaching strategies to help teachers incorporate EDI into their classrooms.

Challenging Ableist Language

Lesson Plan | Allyship | Ableism | Disability

Lesson plan that discusses ableism and challenges the casual use of ableist language in writing pieces.

STEM by the Numbers

Lesson Plan | Underrepresentation | Gender inequality | Racial inequality

This lesson plan can be used to educate students about the barriers faced by underrepresented groups in STEM.

In-class Activities

Recycling is Like a Band-Aid on Gangrene- Guts Documentary

Documentary (12:52) | Anti-colonialism | Role Model

This short documentary provides a look at how an anti-colonial, feminist science lab operates. The practices are relational, land based and the research seeks to bring active environmental and social change.

Glass Obstacle Course: Why so few Women Hold Top STEM Spots

Radio Interview (22:14) | Gender inequality

An interview on CBC's Quirks and Quarks with the U of A's Dr. Lisa Willis, discussing EDI in STEM and the barriers women face.



Books

[Antiracist Baby](#)

Book | Racism

Written by Ibram X. Kendi, the author of the popular book *How to be an Antiracist*, this board book for babies provides language for critical conversations about antiracism.

[The Conscious Kid](#)

Book List | Racism

This is a list of children's books written by Black authors.

[The World Leader in Indigenous Awareness Training](#)

Book List | Racism

Curated by The Conscious Kid, this list provides information about anti-racist books written for children. These books encourage parents and educators to begin teaching anti-racism at a young age.



Inspiring Examples of EDI in Action

This section provides real life examples of how teachers incorporate EDI.

[University of Calgary hosts Indigenous girls from Northwest Territories in STEM camp](#)

News Article with video (2:19) | Indigenous

University of Calgary offered a STEM camp for Indigenous girls (Ages 11-15) from the Northwest Territories.

[2021 Girls in STEM Day Helps Push The Limits](#)

News Article | Gender inequality

Black Gold School Division (BGSD) brought together grade 7-10 students to learn about STEM and the career opportunities available in these fields through hands-on and interactive sessions.

[Keeping Doors Open: Girls, STEM & Their Future Careers](#)

Tip sheet | Gender inequality

Girl Guides of Canada created tip sheets backed up by research for educators, parents, girls, and employers on how to support girls getting to the STEM pipeline.

See our [general toolkit](#) for more resources or information.

Thank you for using the WISEST EDI Toolkit, we hope you found it helpful. If you have any feedback on our toolkits, we'd love to hear from you! Please send us an email at wisest.outreach@ualberta.ca