“Why am I muted?”
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ACS Career Navigator: Your Home for Career Services

Whether you are just starting your journey, transitioning jobs, or looking to brush up or learn new skills, the ACS Career Navigator has the resources to point you in the right direction.

We have a collection of career resources to support you during this global pandemic:

- Professional Education
- Virtual Career Consultants
- ACS Leadership Development System
- Career Navigator LIVE!
- ChemIDP
- College to Career
- ACS Webinars
- Virtual Classrooms

Visit [www.ACS.org/COVID19-Network](http://www.ACS.org/COVID19-Network) to learn more!

ACS Department of Diversity Programs

Advancing ACS's Core Value of Diversity, Inclusion & Respect

We believe in the strength of diversity in all its forms, because inclusion of and respect for diverse people, experiences, and ideas lead to superior solutions to world challenges and advances chemistry as a global, multidisciplinary science.

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ACS Scholars Endowment Founder Joe Vacca, retired Vice President of Chemistry, Merck & Co., meets with his 2018 ACS Scholar Johanna Masterson, now a grad student at Princeton University.

“Chemistry has been good to me...so I wanted to make a significant gift to provide that opportunity to others.”

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The American Association of Chemistry Teachers offers an online growing teaching resource library, including lesson plans, labs, demos, simulations, animations, student passes, videos, and more for grades K–12.

https://teachchemistry.org

Diversity, Inclusion, and Respect Advisory Board (DI&R AB)

- Supports the ACS Board of Directors and Committee on Professional and Member Relations (P&MR) in implementing the Society’s core value of Diversity, Inclusion, and Respect
- Involved in both strategy recommendations and tactical execution, with the goal of seeing holistic engagement towards a more inclusive Society and scientific community
- Central hub for ACS members and governance units working together to build a culture of inclusion within ACS
OBJECTIVES

• To share ideas, insights, and perspectives on promoting an equitable, inclusive STEM classroom

• To obtain practical ideas to encourage equity and inclusivity in the STEM classroom

• To discuss challenges and barriers to achieving equity
**Audience Survey Question 1: Temperature Check**

How often do you engage in implementing equitable practices in your classroom?

- Daily
- Weekly
- Monthly
- Never, but Interested

**Defining Equity in Education**
EDUCATIONAL EQUITY

Educational equity means establishing systems to ensure that every child has an equal chance for success. This requires understanding the unique challenges and barriers individual students or student populations face and providing additional supports to help them overcome those barriers. While it may not ensure equal outcomes, such effort provides the conditions for equal opportunity for success.*

Thinking Maps: Equity in Education
https://www.thinkingmaps.com/equity-education-matters/

EQUITY IN SCIENCE EDUCATION

“Equity in science education requires that all students are provided with equitable opportunities to learn science and become engaged in science and engineering practices............. In addition, the issue of connecting to students’ interests and experiences is particularly important for broadening participation in science.” — NRC Framework, p. 28

A Framework for K-12 Science Education
1. What experiences in your past have led you to teach in STEM education?
2. What purposeful actions do you take to provide an equitable, inclusive learning experience, so that all students can see themselves pursuing careers in STEM fields?

**EStABLISH AN EQuITABLE CLASSROOM**

- Develop Classroom Norms (with students)
- Have high academic and behavioral expectations of *all* students
- Reflect on personal beliefs /experiences to increase awareness to gender, racial, religious, and other forms of diversity.
- Be sensitive to and flexible about the ways diverse students think, behave, and communicate.
- Believe that *all* students can be successful
SCIENTIFIC COLLABORATION
Science is Universal

I read your paper. Let us collaborate.
My pleasure.

USE CLASS BUILDING AND TEAM BUILDING ACTIVITIES

Ana

Davis
CONNECT LEARNING TO STUDENT INTERESTS

- Student-created web-sites

- Student created games/apps

Our project is game. It was coded using python and turtle graphics. The objective is to dodge the incoming spaceships by moving left and right.

Project Idea

To make a game about a student surviving school
USE REAL LIFE EXPERIENCES TO CONNECT SCHOOL LEARNING TO STUDENTS’ LIVES

Create the Best-Fit Line

Lines used to be the only kind of mathematical relationship we needed. Lots of models are linear.

But lines are the wrong model here! What does your line say will happen to the basketball?

https://www.desmos.com/

USE REAL LIFE EXPERIENCES TO CONNECT SCHOOL LEARNING TO STUDENTS’ LIVES

A line can help.

Lines can help us be more precise.

The path for a safe landing of the airplane follows the line 
\[ y = 15 - x. \]

Let's try this one more time. Move the plane so it lands safely. Then press "Submit" to check your answer.

https://www.desmos.com/
**Audience Survey Question 2:**

What do you think is the biggest challenge to implementing equitable practices in the STEM classroom?

- Time
- Lack of Knowledge/Training
- Teacher Expectations
- Stereotypes/Implicit Bias
- Systemic Constraints

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**Guiding Questions**

3. In your work with students, what aspect(s) of equity and inclusivity do you see as the biggest challenge?
AUDIENCE SURVEY QUESTION 3:

Which of the following Equitable Classroom practices will you intentionally commit to focus on? Please select all that apply.

a) Use class building and teambuilding activities
b) Use real-life experiences to connect learning to students’ lives
c) Use instructional materials that reflect students’ backgrounds and interests
d) Use heterogeneous and cooperative learning groups
e) Ask for students’ feedback on the effectiveness of instruction

THE FOUR DIMENSIONS OF TEACHING AND LEARNING — RELEVANT TO ADDRESSING EQUITY IN THE CLASSROOM

STUDENTS
Know your students - understand the ways that students from various social and cultural backgrounds experience the classroom

COURSE CONTENT
Create a curriculum that incorporates diverse social and cultural perspectives

TEACHER
Know oneself with a prior history of academic socialization interacting with a social and cultural background and learned beliefs

TEACHING METHODS
Use a repertoire of teaching methods to address learning … of students from different social backgrounds more effectively

THANK YOU TO THE FOLLOWING CONSULTANTS/CONTRIBUTORS

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- Erik Holderman - Producer and Program Manager | ACS Webinars® / ACS “Program-in-a-Box”™
- Natalie LaFranzo, Ph. D - Chair - Diversity, Inclusion & Respect Advisory Board | ACS
- Ms. Michele Lombard - Science Specialist | APS
- Shantha Smith Ph. D - Equity and Excellence Coordinator | APS

RESOURCES

- https://www.iamascientist.info/
- https://www.nationalequityproject.org/
- https://www.desmos.com/
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