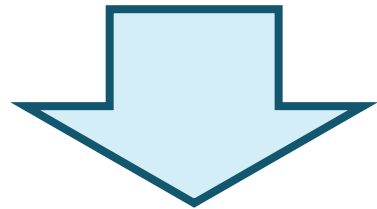


# Achieving the Equitable Classroom Environment: Recommendations for SESE Faculty to Increase Student Retention

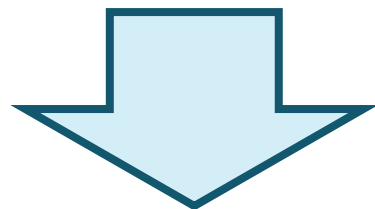
**Searra Foote**

**Junior Undergraduate**

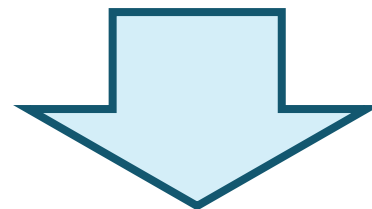
# What norms and expectations should SESE faculty follow to create an equitable classroom environment and how can they be held accountable for following them?



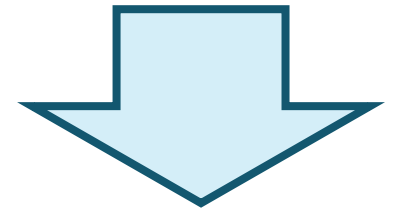
**Retention for STEM undergraduate students - especially in marginalized groups**



**Personal privilege, implicit biases, and stereotype threat**



**The role that faculty play**



**Positive environment that prepares students for success**

# Why should we address this problem?

- **20% of Latino and 40% of Black students** do not end up earning the natural sciences degree they initially set out to pursue, while this is observed for only **1.5% of white students**. (Killpack and Melón 2016)
- **White privilege** is both invisible and detrimental to women of color in the field and most people do not even know they have it. (Sparks 2017)
- **Intersecting identities** cannot reduce a student to just one experience or identity and can reveal serious inequities that are present in college education. (Sparks 2017)
- **White and male students were found to have higher course grades and higher attendance** than non-white and non-male students. (Binning et al. 2020)

# Why should we address this problem?

- Before completing a math test, students were first asked **demographic questions**, which was found to **negatively impact** the performance of students that belonged to underrepresented groups. (Binning et al. 2020)
- First generation college students comprise about one-third of students that attend college and are often disadvantaged by being subjected to **classroom competition that leads to impostor syndrome**. (Canning et al. 2019)
- Students of color were less likely to enter a mentoring relationship with their professors, which is often due to the **lack of interaction or behavioral cues** in the classroom. (Hurtado et al. 2011)

# How can we begin to solve this problem?

**1. Design and implement a required, off-site, multi-day workshop for faculty.**

(Sanders O'Leary et al. 2020) and (Isaac et al. 2016)

**2. Encourage faculty to include a discussion-based intervention in their classes.**

(Binning et al. 2020)

**3. Build awareness around competition.**

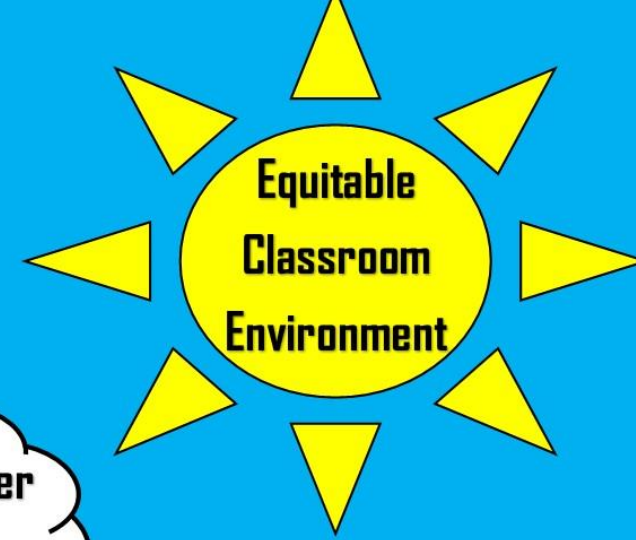
(Canning et al. 2019)

**4. Adjust faculty job requirements to allow more time for sustained interaction with their students.**

(Hernandez et al. 2020)

Over 50% of professors were able to implement change after attending a workshop

Learn about intersectional identities to promote self-awareness



Frame change positively and encourage discussion

Encourage working together to avoid classroom competition

Lead a discussion-based reflection in the classroom

20% of Latino, 40% of Black, and only 1.5% of White students drop out of the Natural Sciences



WHAT NORMS AND EXPECTATIONS SHOULD TENURED SESE FACULTY FOLLOW TO CREATE AN EQUITABLE CLASSROOM ENVIRONMENT AND HOW CAN THEY BE HELD ACCOUNTABLE FOR FOLLOWING THEM?

Be aware of:  
Personal privilege,  
Implicit biases, and  
Stereotype threat

Be approachable in providing support to students

Maintain sustained interaction with students to demonstrate they belong in STEM