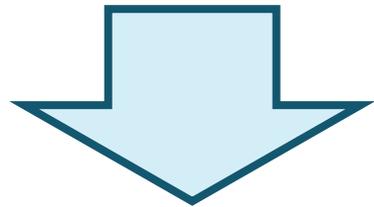


# Achieving the Equitable Classroom Environment: Recommendations for SESE Faculty to Increase Student Retention

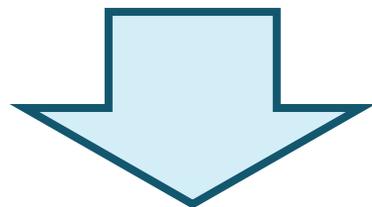
**Searra Foote**

**Junior Undergraduate**

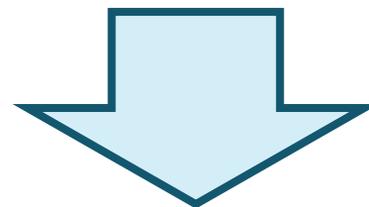
# What norms and expectations should SESE faculty follow to create an equitable classroom environment and how can they be held accountable for following them?



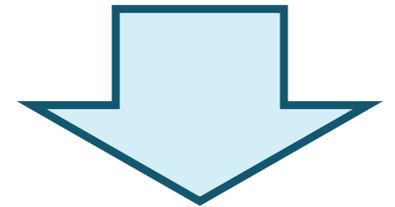
**Retention for STEM undergraduate students - especially in marginalized groups**



**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.**

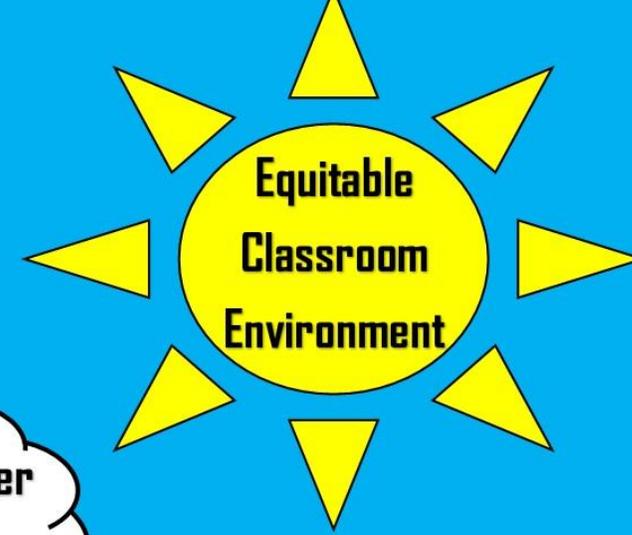
(Canning et al. 2019)

**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**