Student questions: Students from SES 496/598 colloquium on "Equity in the Academic Sciences"

Searra Foote: *"Achieving the Equitable Classroom Environment: Recommendations for SESE Faculty to Increase Student Retention"*

Many faculty tend to drill in how difficult their class will be so that students try harder in them. Would you advise against framing classes this way?

Yes, I would definitely advise against drilling in the difficulty of the class. Students in rigorous STEM courses are often subjected to feeling like succeeding is next to impossible, and these feelings are worsened when the students repeatedly hear that the class is difficult. While some faculty may believe that reminding the students of the difficulty is encouraging them to work harder, this method can actually be counter-intuitive and cause the students to overwhelm themselves and shut down completely. It has been shown that students in these classroom environments do experience lower motivation. It may be important for the faculty member to acknowledge to the students that this class may be difficult, but then to follow up that statement with suggestions to help the student succeed. After this is acknowledged, repeatedly reminding the students to seek help in office hours, work together on homework, or providing outside resources are a few examples of the positive reinforcement that the students need to succeed.

How do you get faculty and students to go to workshops and view them as important and worth paying attention to?

In the workshop examples that I have read, the workshops were considered mandatory requirements, with an alternate time offered for those that could not make it. When it comes down to creating change, getting people to view this change as important and worth paying attention to is a great point to consider. When workshops are optional, usually the people that want to be there and want to make a positive change are those that attend. This is the main reason why I recommend that such a training should be mandatory for faculty. In my research, I have found that a multi-day, off-site workshop was the most effective. Viewing the workshop as important can usually begin while at the workshop. Sharing anonymous student testimonials, for example, led to attendees realizing that these are real issues affecting real people. The strategies employed at these workshops were to avoid giving a lecture and shift towards a discussion-based approach. Asking reflection questions and encouraging this discussion is often helpful in ensuring that the participants are engaged. However, when simply emphasizing the problems without a discussion of solutions the participants felt negatively about solving them. It is also important to avoid framing the workshop as placing blame or implying that these issues are the direct fault of faculty. For example, an implicit bias workshop had the faculty complete a quiz to determine where their own implicit biases stand. This led to the participants feeling like they were being individually targeted for larger, systemic issues that exist in academia. It is more important to focus on the positive actions and positive steps necessary for change. When following all of the aforementioned ingredients to a successful workshop, participants were able to provide survey responses that demonstrated what they had learned, and many reported later on that they were able to implement change at the classroom level.

How does imposter syndrome affect first generation college students?

Imposter syndrome can affect anyone of any group, but those in historically marginalized groups are usually more susceptible. Imposter syndrome is the belief that one is not as smart or competent as others perceive. This often stems from comparing oneself to their peers, which can especially manifest in classes that are known to be challenging or even competitive. First generation students can especially be subjected to this, considering that if they are first-generation there is likely a large amount of pressure on them to succeed. Feeling like an imposter is actually quite common among STEM students, so allowing the students to feel like they are not alone in their struggles is the first step to combating imposter syndrome. This is why it is so important to realize the effect these feelings can have on student success and to understand how to mitigate them. One of the best ways to begin to combat imposter syndrome is to praise students for their efforts and encourage an open space where asking for help is a norm, which will lessen the burden of classroom competition. Discussing strategies to encourage success is a great method as well.

What are stereotype threats and could you give a few examples of how they manifest in the classroom setting?

Stereotype threats can negatively affect a student, and they often come from implicit biases. Anyone can be unaware of their own implicit biases and unintentionally stereotype their students. This could lead to making assumptions about their students based on intersectional identities they might not fully understand. The students that fall into this stereotype threat then have their classroom performance negatively affected. Stereotype threat directly concerns the identity of the student, where low competence to perform well on an exam, for example, may be assumed. The affected students would then feel pressure to succeed and their cognitive load increases, thus negatively affecting their score on that exam. This is a typical example of stereotype threat and can manifest into behaviors or verbal communication that conveys an inequitable approach to their idea of student success and expectations. While most likely unintentional, a simple comment made in front of the student could be detrimental for them and can be subtle or obvious. Overall, they manifest while in direct communication with the student and can stay with the students for a long time. This is why it is important to learn more about intersectional identities of students, as well as faculty understanding their own. Learning how to support students with equity is a solution and will set every student up for success, both in classroom and in their future careers.