

## Review of Online Module

### Week 6: Inclusive Teaching

#### Module 6: The Importance of Inclusive Teaching and the Mistakes Instructors Make

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#### Learning goals of the online module

1. Define stereotype threat and growth mindset.
2. Identify language that could induce stereotype threat.
3. When planning a lesson, list your assumptions about students pre-existing skills, knowledge, and attitudes relevant to the lesson.
4. Use a scholarly literature article related to Inclusive Teaching to develop techniques for creating a more inclusive classroom atmosphere.
5. Given a particular scenario and classroom dynamic, propose approaches to leveraging diversity to promote learning.

#### Description of main activities of online module

##### Online Videos

- Dramatization of a Physics TA's First Day of Class [07:38] – Trey Mack, a graduate student from Vanderbilt University, presents a dramatization which gives examples of how an instructor can make students feel isolated or uncomfortable in the classroom.
- Avoiding Spotlighting and Starting to Leverage Classroom Diversity, Class Welcome [4:25] - Trey Mack, a graduate student from Vanderbilt University, has a discussion with Dr. Alice Pawley from Purdue University about the dramatization in the first video in this module. Specifically the mistakes the theoretical TA makes while welcoming the students to the class and how those mistakes can be corrected in order to create an inclusive classroom.
- Avoiding Spotlighting and Starting to Leverage Classroom Diversity, Pre-test [7:11] - Trey Mack, a graduate student from Vanderbilt University, has a discussion with Dr. Alice Pawley from Purdue University about the dramatization in the first video in this module. Specifically the mistakes the theoretical TA makes during while describing the pre-test for the course and how those mistakes can be corrected in order to create an inclusive classroom.
- Avoiding Spotlighting and Starting to Leverage Classroom Diversity, Pen Policy [8:51] - Trey Mack, a graduate student from Vanderbilt University, has a discussion with Dr. Alice Pawley from Purdue University about the dramatization in the first video in this module. Specifically the mistake the theoretical TA makes by highlighting a specific gender during his introduction and how those mistakes can be corrected in order to create an inclusive classroom.
- Avoiding Spotlighting and Starting to Leverage Classroom Diversity, Language Barrier [5:32] - Trey Mack, a graduate student from Vanderbilt University, has a discussion with Dr. Alice Pawley from Purdue University about the dramatization in the first video in this module. Specifically the mistakes the theoretical TA makes when interacting with a heavily accented student and how those mistakes can be corrected in order to create an inclusive classroom.

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- Avoiding Spotlighting and Starting to Leverage Classroom Diversity, Workload [7:13] - Trey Mack, a graduate student from Vanderbilt University, has a discussion with Dr. Alice Pawley from Purdue University about the dramatization in the first video in this module. Specifically the mistakes the theoretical TA makes when describing the workload of the course and how those mistakes can be corrected in order to create an inclusive classroom.
- Avoiding Spotlighting and Starting to Leverage Classroom Diversity, Physics Majors [5:49] - Trey Mack, a graduate student from Vanderbilt University, has a discussion with Dr. Alice Pawley from Purdue University about the dramatization in the first video in this module. Specifically the mistakes the theoretical TA makes by assuming everyone in the class is in the same major and how that mistake can be corrected in order to create an inclusive classroom.
- Interview with STEM Faculty Discussing Social-Belonging: Dr. Kelly Holley-Bockelmann [7:33] – Trey Mack interviews Dr. Holley-Bockelmann from Vanderbilt University focusing on a research paper that investigates whether or not a feeling of social belonging can affect academic performance. She shares her experiences with social belonging during her education as well as how she might implement strategies from this paper in her classroom to increase a feeling of social belonging.
- Interview with STEM Faculty Discussing Social-Belonging: Dr. William Robinson [8:53] - Trey Mack interviews Dr. William Robinson from Vanderbilt University focusing on a research paper that investigates whether or not a feeling of social belonging can affect academic performance. He shares his experiences with social belonging during his education as well as how he might implement strategies from this paper in his classroom to increase a feeling of social belonging.
- Interview with STEM Students Discussing Social-Belonging: Abraham Padilla [5:07] - Trey Mack interviews graduate student Abraham Padilla from Vanderbilt University focusing on a research paper that investigates whether or not a feeling of social belonging can affect academic performance. He shares his experiences with social belonging and how it affected his education as well as how he created a feeling of social belonging during his education.
- Interview with STEM Students Discussing Social-Belonging: Leolene Jean [8:46] - Trey Mack interviews graduate student Leolene Jean from Vanderbilt University focusing on a research paper that investigates whether or not a feeling of social belonging can affect academic performance. She shares her experiences with social belonging and how it affected her education as well as how she created a feeling of social belonging during her education.
- An Interview with Alice Pawley [8:22] – Trey Mack, a graduate student at Vanderbilt University, Interviews Dr. Alice Pawley from Purdue University regarding the research group she started focusing on gender in the STEM fields, especially engineering. They also discuss the themes of some of the research their group performs.
- An Interview with Alice Pawley: Current Questions [7:08] - Trey Mack, a graduate student at Vanderbilt University, Interviews Dr. Alice Pawley from Purdue University focusing on the current topics her group is researching. She describes how her current project will provide insight into how the current employment climate in engineering may be skewed to certain races and genders.
- An Interview with Alice Pawley: Diverse Perspectives [6:56] – Trey Mack, a graduate student at Vanderbilt University, and Dr. Alice Pawley from Purdue continue their discussion about how race and gender play a role in today’s educational and employment world and how her research will illuminate some of the issues this role creates.

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- Classroom Climate [7:32] - Dr. Michele DiPietro from Kennesaw State University introduces the affective domain in education and how it can affect classroom climate. He goes on to discuss how classroom climate can affect student performance, especially for certain groups of students.
- Classroom Climate: Climate Continuum [4:45] - Dr. Michele DiPietro from Kennesaw State University introduces the course “climate continuum”. This climate continuum is a useful tool for instructors to determine what kind of course climate they create in their course and how they can develop a climate that is the most conducive to effective education.
- Classroom Climate: Manifestations [11:17] - Dr. Michele DiPietro from Kennesaw State University outlines different aspects of instructor-student communication in that can create ineffective classroom climates. He provides examples such as tone, stereotype threat, microinequities and others that can affect student performance in the course.
- Classroom Climate: Strategies [2:51] - Dr. Michele DiPietro from Kennesaw State University outlines several strategies that will help instructors create a classroom climate that is the most conducive to learning as well as personal and educational growth.

Online Discussion Questions

- Stereotype Threat – Was this your first encounter with the notion of stereotype threat? If so, what’s your reaction to the idea that activating a negative stereotype can significantly reduce a student’s performance? If you were familiar with stereotype threat, how has this notion affected how you think about classroom dynamics?
- Teaching Inclusively – Given what you’ve heard in the preceding videos, what would you say to a colleague who didn’t see the value in making efforts to teach inclusively? Why are these efforts important? What small steps might you recommend to your colleague to create more welcoming classroom environment?
- Navigating Transitions – Think back to a time when you transitioned from one phase of your education/career to another (for example: high school to undergrad, undergrad to grad school, grad school to faculty). What factors helped you be successful in that transition? How did you establish a sense of belonging?
- New Perspectives – The preceding faculty and student interviews featured a variety of perspectives on social belonging in the STEM education context. Which comments or perspectives helped you see this topic in a new light? Which ones are likely to inform how you approach teaching?
- New Practices – Read the handout “Six Impactful Teaching Practices to Improve the Academic Achievement of Underrepresented Minorities and First Generation Students.” Identity one or two practices on the handout that you would like to incorporate into your teaching (that you haven’t already). Describe what those practices might look like in your particular teaching context. (For those not yet teaching, you might imagine a particular course you might teach one day.)

## Activities for the MCLC In-person Sessions

### Module 6: The Importance of Inclusive Teaching and the Mistakes Instructors Make

#### Learning goals for MCLC in-person sessions

1. Understand key components of a first day of class introduction and welcome that is inclusive and encouraging.
2. Able to develop and incorporate activities into lesson plans that encourage students to study in groups and develop the sense that their classes are individual learning communities.

	Student Activity/Discussion	Facilitator Notes
<b>Activity #1</b>	Discuss how you would use what you've learned about growth mindset and stereotype threat to revise the "Welcome" speech given by the TA in the dramatization. Then, in groups of two or three, draft a short speech of your own that would be more inclusive and encouraging to students. Each group can then share their speeches with the other groups and receive feedback.	<p>Only take about 5-10min to "write" the speeches. It's not necessary to write out complete sentences. All that is needed is bulleted list of the main points that would be addressed. An ideal speech would include components to:</p> <ul style="list-style-type: none"> <li>• Make the students feel that the instructor is approachable and accessible</li> <li>• Encourage the students to collaborate, working together in class and outside of class</li> <li>• Give each student a voice in the class by having them introduce themselves or participate in another ice-breaker activity, if the course is small enough.</li> <li>• Describe the course goals in a manner that is more likely to excite students' imaginations, e.g., "you'll be able to understand the basics behind how your cell phone works" as opposed to "you'll learn about basic electric circuits"</li> </ul>
<b>Activity #2</b>	In their paper, Gregory Walton and Geoffrey Cohen show that a sense of social belonging can be essential to a student performing well academically. In video 11.3, two professors and two graduate students each describe how finding a good study group helped them develop a sense of belonging and a support network. Brainstorm with other participants ways in which future classroom activities that you design can facilitate the formation of study groups among your students	Think back to the modules that discussed "think, pair, share", peer instruction, and cooperative learning. Designing these types of classroom activities compels students to work together in class, which could naturally facilitate them working together outside of class. Create a bulleted list of specific activities that you might include in a lesson plan that would foster the formation of study groups.

<b>Activity #3</b>	<p>In video 11.4, Alice Pawley discuss how her research on engineering education uncovers rules and practices at higher education institutions that often unintentionally creates structural inequality. Dr. Pawley cites a few specific instances of structural inequality in the video, as well as moments when gender bias led to poor engineering designs. Discuss other instances of structural inequality that you may know of, or that the video made you reconsider. Also, discuss the typical characteristics people often assume the “ideal student/worker” would have in your field. Which groups of students are likely to possess these characteristics and which are not?</p>	<p>For the gender bias issues, a good place to start is Londa Schiebinger’s <a href="#">Gendered Innovations</a> website. For other examples of structural inequality, pgs. 2-4 of <a href="#">this paper</a> by T. Figueroa et al. at UCLA provides a good overview, as well as references to other sources. For the ideal student discussion, an example of characteristics for the ideal physics student might be:</p> <ul style="list-style-type: none"><li>• Naturally brilliant at math</li><li>• Quickly comprehends advanced physics concepts and ideas</li><li>• Hardworking</li><li>• Constantly thinks about ideas related to physics and connecting physics ideas even after the homework or the test is done</li><li>• Participates in undergraduate research</li><li>• Research or physics-related work is the highest priority in their life</li></ul>
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