

Stereotype Threat & Pedagogies for Minimizing its Effects

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Faculty Communities for Inclusive Teaching, 2016



ECOLOGY AND
EVOLUTIONARY BIOLOGY
UNIVERSITY OF MICHIGAN

Project Overview

- As scientists, we study how changes in climate and our physical environment alter biodiversity and species interactions in an ecological community. However, we lack a venue where we can discuss how the academic climate affects the diversity of ecologists and evolutionary biologists in academia. Therefore, we created a discussion group on how stereotype threat, unconscious bias, and privilege influence interactions that faculty, graduate students, and undergraduates have in the classrooms and research labs of the Department of Ecology & Evolutionary Biology.
- We led a reading and discussion group during Winter 2016 on the topic of diversity, equity, and inclusion in biology classrooms and labs
- We discussed stereotype threat as it came up in our readings of *Whistling Vivaldi* and a few corresponding academic papers. *Whistling Vivaldi* is a great introductory text on stereotype threat, its consequences, and impact on undergraduate students' experiences in the field/discipline
- 6 meetings of 90 minutes each

Participants

Discussion Organizers and Co-Leaders

- Jo Kurdziel
- Cindee Giffen
- Marian Schmidt
- Susan Cheng

Members of the Department of Ecology and Evolutionary Biology

- 6 faculty
- 3 post-docs
- ~6 graduate students
- 1 staff member
- 1 undergraduate



Pictured L to R: Cheng, Kurdziel, Giffen, and Schmidt

Key Insights

Participant Interests:

- The scientific nature of *Whistling Vivaldi*
- A safe teaching circle, support group, or space to talk about broad teaching and mentoring concerns
- Learning about experiences of other participants in their classrooms

Participant Quotes:

- "This reading group has become a valuable outlet to discuss and learn about important issues that we do not get a chance to talk about in the department."
- "It has been so interesting and challenging to have these conversations as we all bring our own social identities and comfort (or lack thereof) to discussion and reflect on how things work in our classrooms and beyond"
- "The group has been very important in reaching collective understandings of how issues related to inclusiveness affect everyone and how it affects classroom learning."

Going Forward:

- Continue meeting and read *The Difference* and/or other literature related to Diversity, Equity, and Inclusion issues and participants' interests
- Summarize a 45-minute presentation to share findings with the department
- Q & A with a social scientist? Co-sponsor a seminar speaker whose research is DEI related?

Artifacts

- 2-3 page summaries:
 - Stereotype threat
 - Classroom Climate
 - Values Affirmation
 - Course Structure and Materials
 - Providing constructive feedback



Article
Gender Gaps in Achievement and Participation in Multiple Introductory Biology Classrooms
Sarah L. Eddy,^{1*} Sara E. Brownell,^{2*} and Mary Pat Wenderoth³

Science faculty's subtle gender biases favor male students

DIVERSITY IN SCIENCE
A recipe for change: Creating a more inclusive academy

For a Diverse Faculty, Start With Retention

Recruiting underrepresented faculty without fixing retention problems creates a revolving door, not long-term change, writes Kerry Ann Rockquemore.

By Kerry Ann Rockquemore // January 6, 2016

Elite male faculty in the life sciences employ fewer women

Jason M. Sheltzer¹ and Joan C. Smith^{2*}
¹Department of Molecular, Cellular, and Developmental Biology, ²Department of Psychology, ³School of Management, and ⁴Department of Psychology, Yale University, New Haven, CT 06520
Editor: by Shirley Fitzgibbon, Princeton University, Princeton, NJ, and approved August 21, 2012 (resubmitted for review July 2, 2012)

Article

Increasing Persistence in Undergraduate Science Majors: A Model for Institutional Support of Underrepresented Students

Brit Toven-Lindsey,¹ Marc Levis-Fitzgerald,² Paul H. Barber,³ and Tama Hasson⁴

How To Actually Be An Ally To Students Of Color On College Campuses And Beyond



RESEARCH ARTICLE

Males Under-Estimate Academic Performance of Their Female Peers in Undergraduate Biology Classrooms

Daniel Z. Grunspan^{1,2*}, Sarah L. Eddy^{3*}, Sara E. Brownell⁴, Benjamin L. Wiggins¹, Allison J. Crowe⁵, Steven M. Goodreau⁶



Strength in diversity

Richard B. Freeman and Wei Huang reflect on a link between a team's ethnic mix and highly cited papers.

Resources

- Whistling Vivaldi* by Dr. Claude M. Steele



whistling vivaldi

how stereotypes affect us
and what we can do

CLAUDE M. STEELE

"This is an intellectual odyssey of the first order—a true tour de force."
—WILLIAM C. BOWEN

Constructive feedback in cross-race interactions

Janet B. Ruscher,¹ Devin L. Wallace,¹ Kristin M. Walker,¹ and Lindsay H. Bell¹

Reducing the Gender Achievement Gap in College Science: A Classroom Study of Values Affirmation

Akira Miyake,^{1*} Lauren E. Kost-Smith,² Noah D. Finkelstein,² Steven J. Pollock,² Geoffrey L. Cohen,³ Tiffany A. Ho³

The Mentor's Dilemma: Providing Critical Feedback Across the Racial Divide

Geoffrey L. Cohen
Claude M. Steele
Lee D. Ross

TEACHING FOR RETENTION IN
SCIENCE, ENGINEERING, AND MATH DISCIPLINES:
A GUIDE FOR FACULTY

Marie Kendall Brown
Chad Hershock
Cynthia J. Finelli
Chris O'Neal

Next Steps



- A new book for the reading group: *The Difference*
- Working group or other support for folks to share syllabi, course policies, assignments, and strategies for inclusive teaching