

Teaching for Retention

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Diverse

ISSUES IN HIGHER EDUCATION

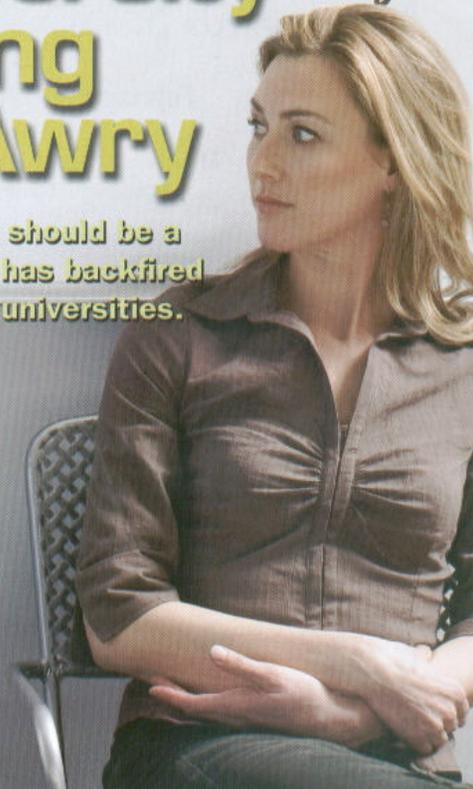
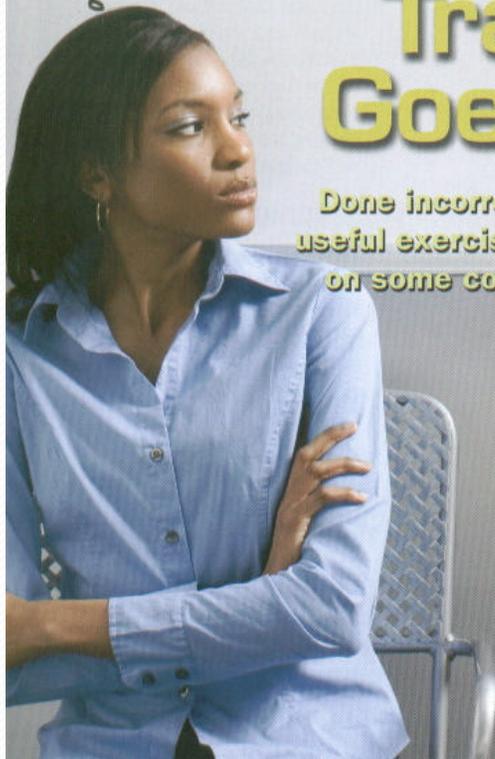
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*She doesn't
have a clue.*

*Why is it
always about
race?*

When Diversity Training Goes Awry

**Done incorrectly, what should be a
useful exercise can and has backfired
on some colleges and universities.**





Opening Reflection Opening Reflection

What is my definition of diversity?

What is the value of a diverse physics profession?





Session Objectives

Participants will be able to:

- Reflect on the benefits and challenges of diversity in physics
- Use case studies to promote discussions about diversity
- Identify the research basis for unconscious bias and stereotype threat and articulate the implications of such studies
- Discuss strategies to address the challenges and benefits of diversity.
- Reflect on a personal definition of diversity



Personal Glimpses



Who am I?

- Product of single mom, rural Virginia
- HBCU Product
- Retired Army Officer
- College Professor
- Professional Society Executive
- Retired/Retreaded



I Believe...

Those educated in diverse settings are:

- More likely to be intellectually nimble and creative
- More likely to make meaningful contributions
- More likely to be effective team players
- More likely to be successful leaders
- More likely to do the right thing

Do I really believe every student in this class can succeed?

Are my biases impacting who I call upon in class?

Why are so few women taking my class?

Did I offend anyone with that last example?

Is this materials relevant to my students' lives?

Are any of my students feeling excluded?

Am I paying attention to my students with disabilities?

Did I mess up the equation on the board?



Data on Unconscious Bias and Stereotype Threat

Parents' estimates of math ability are higher for sons than for daughters, despite no gender differences in grades or test scores.

(Yee, D.K. and J.S. Eccles. 1988. Parent perceptions and attributions for children's math achievement. *Sex Roles* 19: 371-333).

Data on Unconscious Bias and Stereotype Threat

Blind, randomized trial: When asked to rate the quality of verbal skills indicated by a short text, evaluators rated the skills as lower if they were told an African American wrote the text than if they were told a white person wrote it, and gave lower ratings when told a man wrote it than when told a woman wrote it.

(Biernat, M., and M. Manis. 1994. Shifting Standards and Stereotype-Based Judgments. *Journal of Personality and Social Psychology* 66:5-20).

Data on Unconscious Bias and Stereotype Threat

CVs of real women were assigned a male or female name, randomly, and sent to 238 academic psychologists to review either 1) at the time of job application or 2) at the time of review for an early tenure decision. Respondents were more likely to hire the applicant if a male name was found on the CV at the time of job application. Gender of applicant had no effect on respondents' likelihood of granting tenure when their CV was reviewed as part of an early tenure decision. However, there were four times more "cautionary comments" in the margins of the tenure packages with female names such as "We would have to see her job talk."

(Steinpreis, R. E., K.A.Anders, and D. Ritzke. 1999.The impact of gender on the review of the curricula vitae of job applicants and tenure candidates:A national empirical study. Sex Roles 41:509-527).



Research on Bias

- In every study, find significant effect of gender or race of person being evaluated
- **NO** significant effect of gender or race of person doing the evaluation

Courtesy: Jo Handelsman

Data on Unconscious Bias and Stereotype Threat

Blind, randomized trial: Evaluators rated the same job performance lower if told it was performed by a woman. This difference was substantially greater when evaluator was busy or distracted.

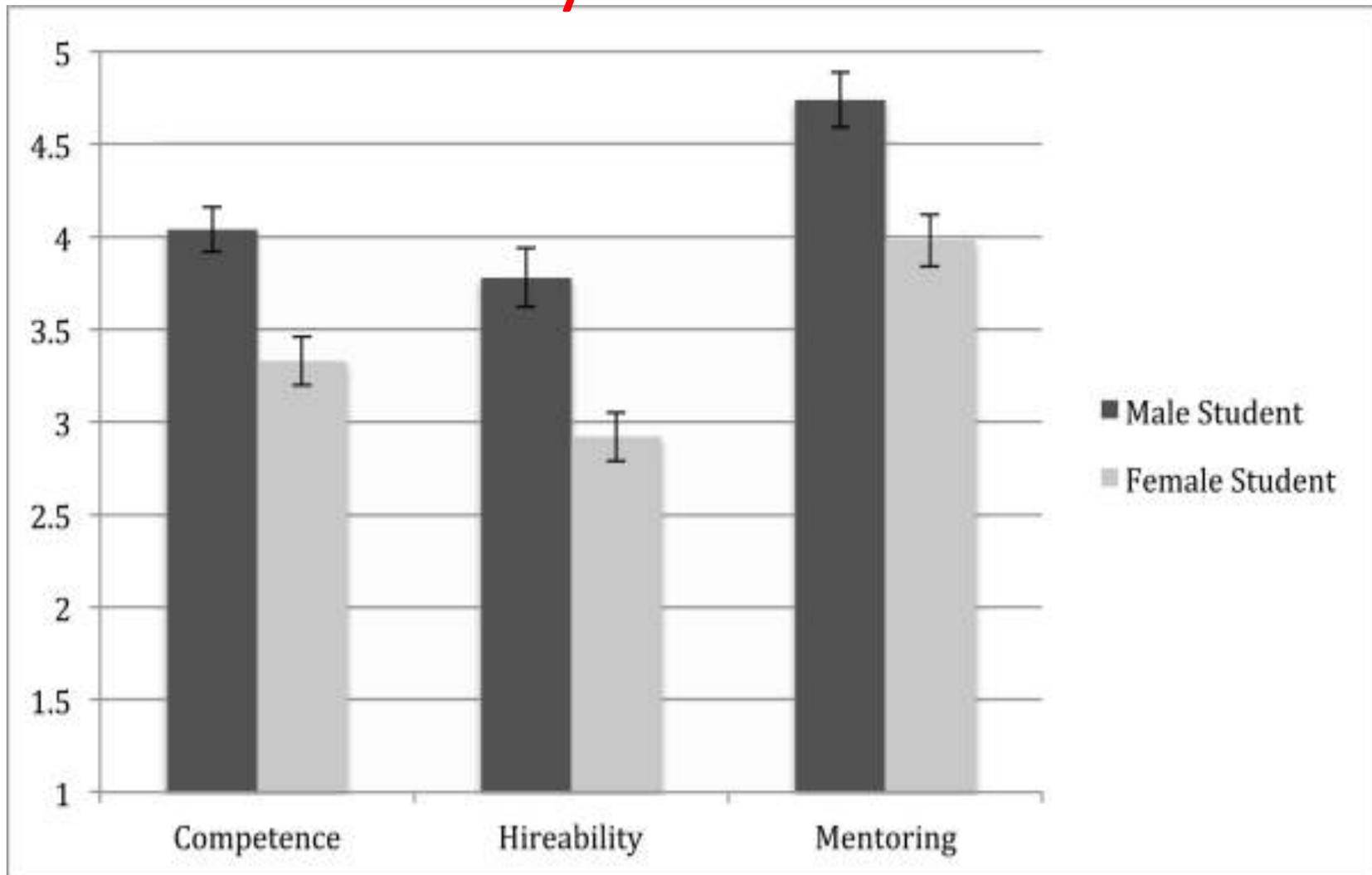
(Dovidio, J. F., & Gaertner, S. L. 2000. Aversive racism and selection decisions: 1989 and 1999. *Psychological Science*, 11, 319–323, and Martell, R. F. 1991. Sex bias at work: The effects of attentional and memory demands on performance ratings for men and women. *Journal of Applied Social Psychology*, 21, 1936-1960.)

Reactions to Evidence of Bias

- Not here.....
 - “It’s like that in Sweden, but not here in the U.S.”
 - “It’s like that at rural universities, but not urban ones.”
 - “It’s like that at Harvard, but not at UW.”
 - “It’s like that at UW, but not at Harvard.”
 - “It’s like that in the economics department, but certainly not here in physics!”
- “Women and minorities are just too sensitive”
- “What’s the standard deviation in line 4 of Table 3 of the 19xx study?”

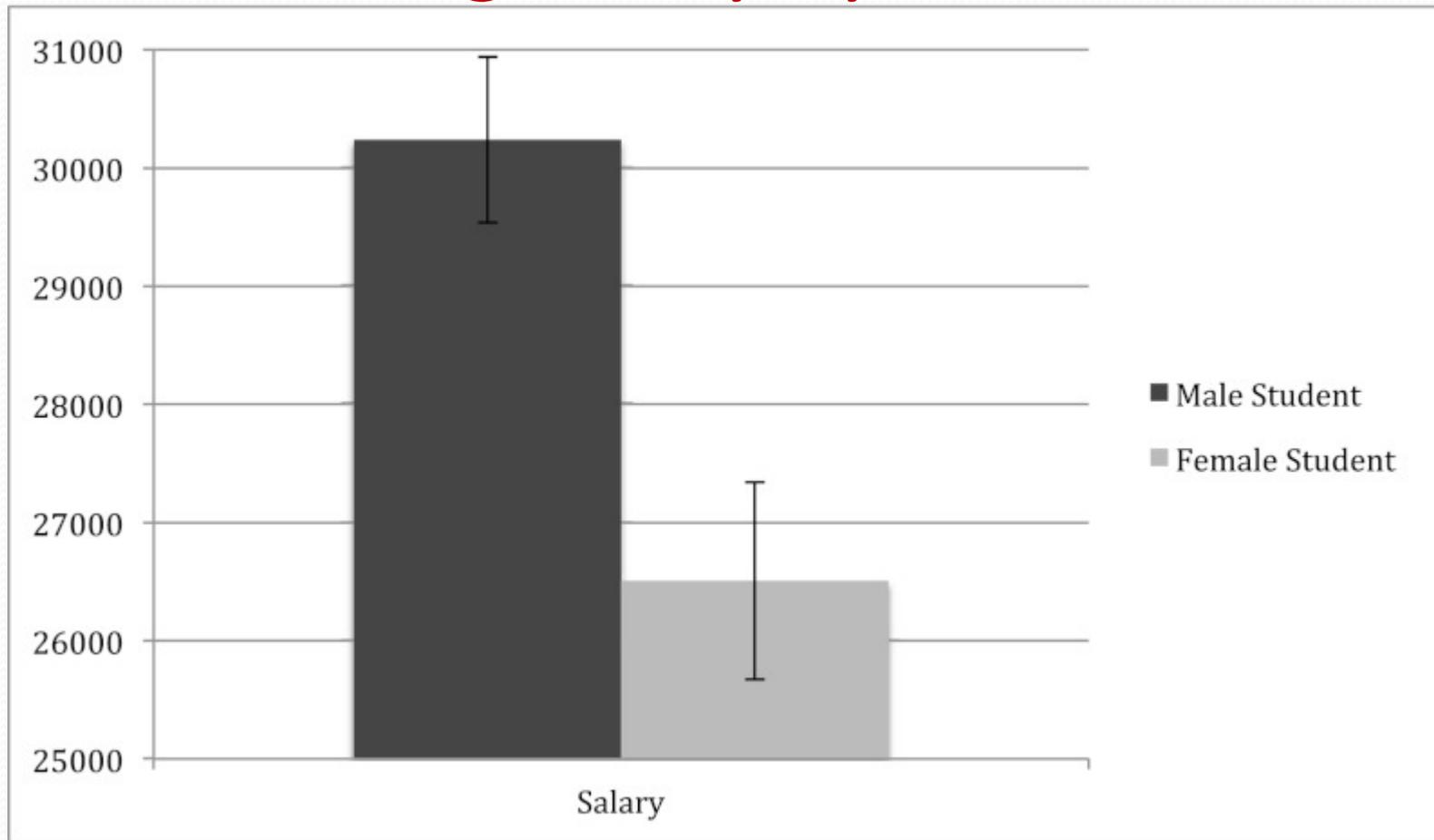
Courtesy: Jo Handelsman

Competence, Hireability and Mentoring by Gender



PNAS 2012 Oct 9, 109(41)

Starting Salary by Gender



PNAS 2012 Oct 9, 109(41)

Tidbits for Leaders: What the Data Show

- **Images of great black figures positively affected ratings of black applicants** (Blair et al., 2001; Dasgupta & Greenwald, 2001)
- **Subjects will express less prejudice against African Americans if they are instructed to avoid prejudice** (Lowery and Harkin, 2001)
- **Evaluators exhibit less discrimination when the evaluation criteria is constructed first** (Uhlmann and Cohen, 2005)
- **Evaluators are more likely to rely upon underlying assumptions and biases when they cannot give sufficient time and attention to their evaluations** (Martell, 1991)



Case Studies

- Why case studies?
- Spend time talking about your assigned case study with colleagues at your table. Be prepared to share/compare your strategy/conclusions with the larger group.
- In addition to the specific question asked, think about what your institution might do to address the issue presented in the case

Assignments

Case Study	Tables
To Intervene or Not to Intervene?	Even
A Different Approach?	Odd



To intervene or not to intervene?

Jim, a Native American student, has done poorly on the first two exams in Barbara Ross's class. He does not participate in class and has not come to see her outside of class. Even if he does exceptionally well on his final exam, he will not get a good grade, and Ross fears that he will not do well at all and probably will fail, given his performance to date. She generally leaves it up to students to come to see her when they are in trouble, but in this case, she thinks that Burton might be shy and makes a point of asking him to see her. On talking with him, she determines that he is not very realistic about his performance and the prospects of reversing his grade. She suggests that he might consider dropping this course and taking a lower level class so that he will not damage his grade point average. She feels that she has gone out of her way to help Burton and is puzzled when he resents being singled out and thinks that her suggestion is insulting. What should Barbara do? What should Jim do?

A Different Approach?

Paul Smith, an instructor in an introductory physics class, is explaining to the class how to work out a particular problem. Sally, a student in his class, observes “Mightn’t it be faster to ...?” and continues by explaining her approach. Smith patiently explains that that is not the way it’s done and goes on to explain the problem. A few minutes later Sally raises her hand again and asks “Excuse me, but I’ve worked out the problem my way and it does seem faster. Would you at least tell me why it is wrong?” Smith is irritated and is about to go on when another student, John interrupts and says, “Sally is right. You should do it her way. I did it and it is a lot faster.” Smith looks over the problem again and then remarks to the class, “Well, I guess it’s never too late to learn new tricks. Thank you John, and you too, Sally.” What should Sally do? What should John do? What should Paul do?



Credit where it is due?

Marie Louise Moreau wondered whether she was the only student in her chemistry group who had read the assignment before coming to class. She had expected more when she had taken a plane from Haiti to study at a prestigious college in the United States.

She spoke up. “Well, when I was doing the reading,” she said, “there was a note in the sidebar that said you should add titrant slowly near the endpoint. That way, when the solution changes color, it is easier to tell how much titrant was added.”

Joe, her group’s self-appointed leader, looked at her with doubt. Could she be right? He didn’t want to rely on Marie’s word alone. “Adam!” he called to their TA.

Joe repeated Marie’s statement to Adam. “Is that true?” he said.

“Good memory, Joe,” said Adam, clapping Joe on the shoulder. “That’s right. You’re an asset to your group.” What should Marie do? What should Joe do? What should Adam do?

Session Recap

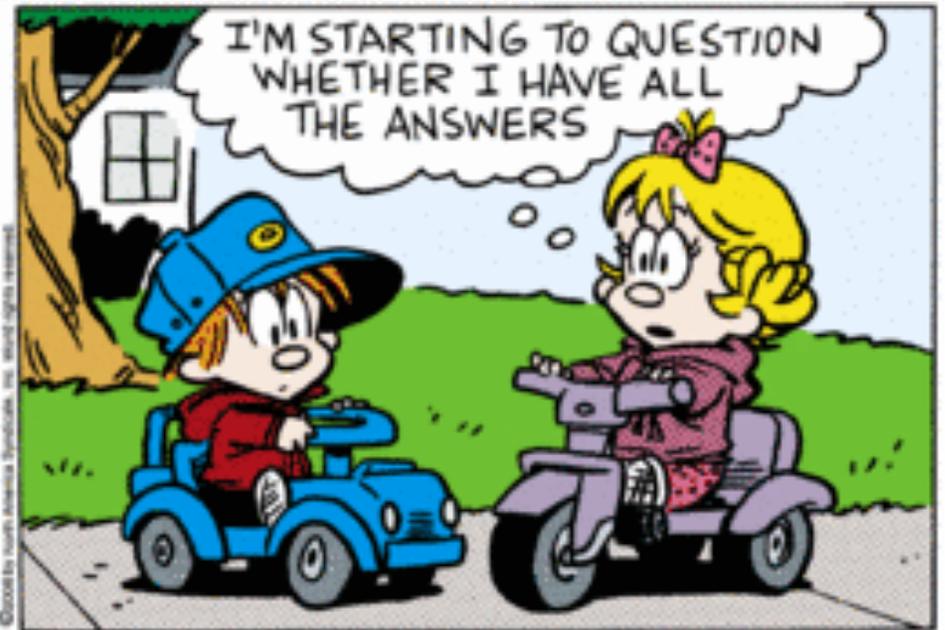
We have:

- Reflected on the benefits and challenges of diversity
- Used case studies to discuss aspects of diversity
- Described the research basis for unconscious bias and stereotype threat and discussed the implications of such studies
- Identified various aspects of diversity and articulated possible impacts
- Begun to develop strategies to address the challenges and benefits of diversity
- Reflected on a personal definition of diversity

Closing Reflection

What are 1 or 2 elements of your conception of diversity that you had not considered before this session?







Acknowledgements

- Many students who taught me to listen
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<http://www.cirtl.net/DiversityResources/>
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- Dr. Robert Lue - Harvard University



Thank You!