

# Teaching for Retention

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# Diverse

ISSUES IN HIGHER EDUCATION

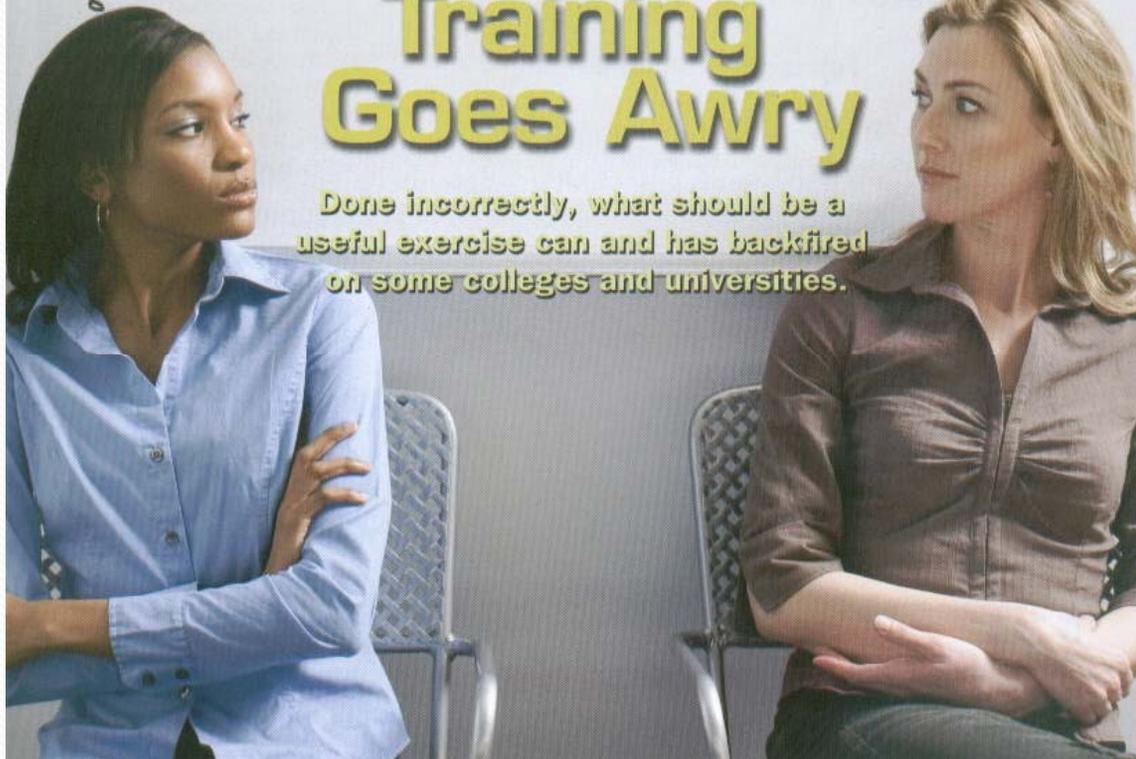
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*She doesn't  
have a clue.*

*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 the value of a diverse physics profession?

What is my definition of diversity?





# 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.

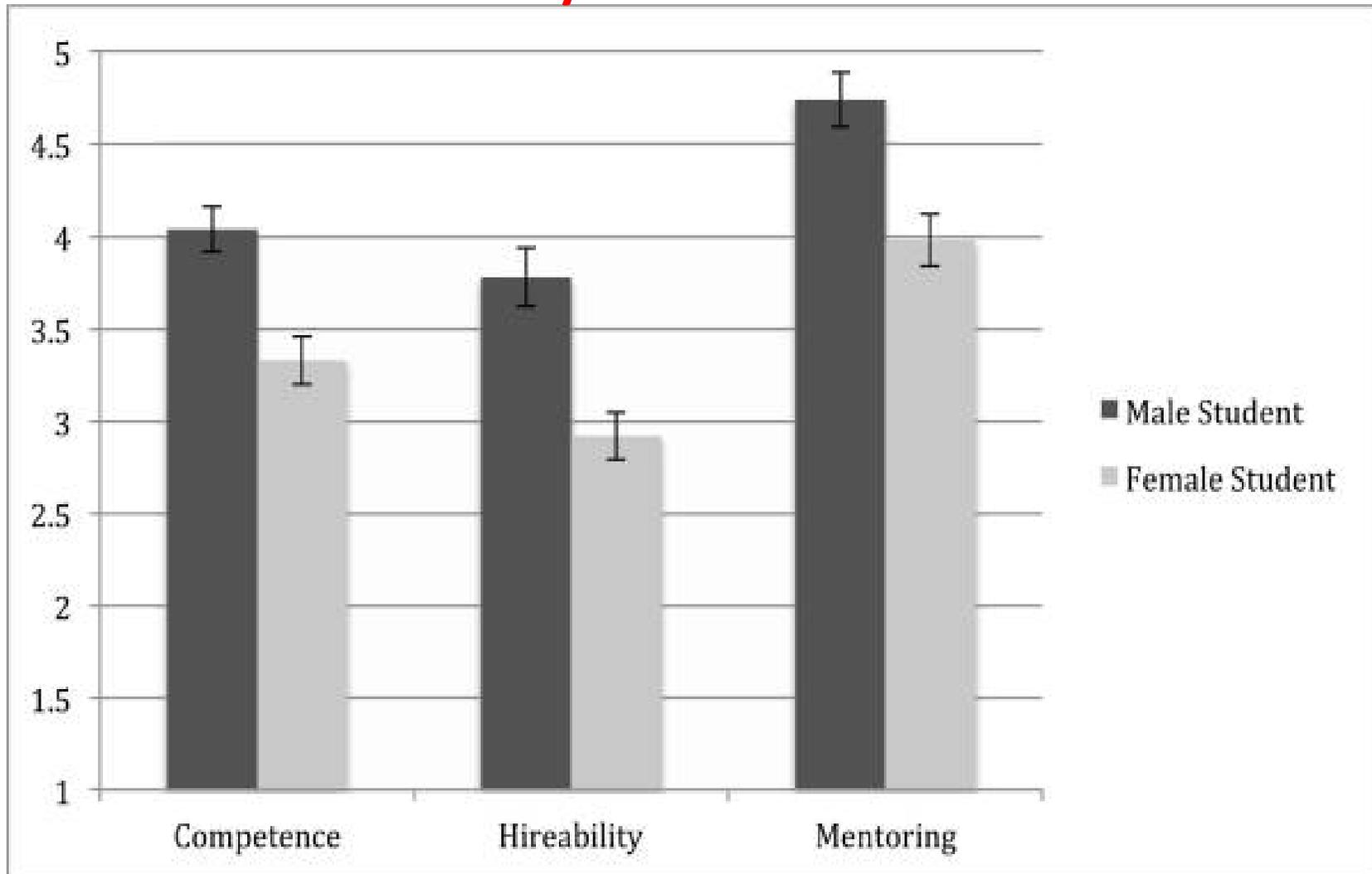
(Dovidio, J. F., & Gaertner, S. L. 2000. Aversive racism and selection decisions: 1989 and 1999. *Psychological Science*, 11, 319–323, and Martell, R. F. 1991. Sex bias at work: The effects of attentional and memory demands on performance ratings for men and women. *Journal of Applied Social Psychology*,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

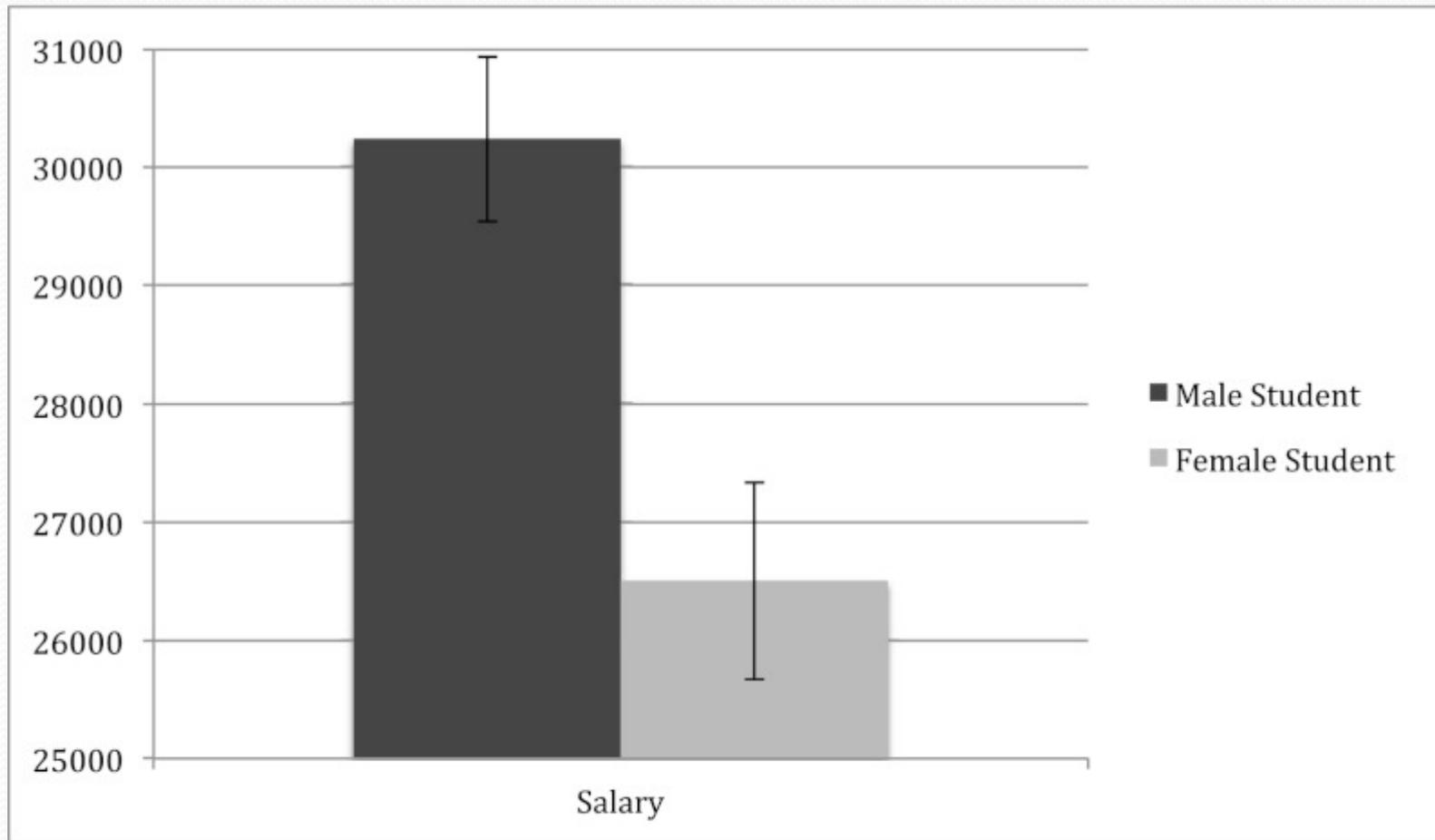
Courtesy: Jo Handelsman

# 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
First Day of a Physics Class	Even
Criteria for Review	Odd

# First Day of a Physics Class

You are a Department Chair observing a recently hired instructor teaching her first day of a junior level physics course. Amy, a forty year old student in the department, is taking the course and as she sits down in the second row, you notice that she is the only female in a class of 20. The instructor walks in, announces the name of the class and says, “Is everyone sure they are in the right place?” She then turns around, looks straight at Amy, “This is Physics 500. Are you sure you are in the right place.” She looks at her and says, “I’m quite sure.” She goes on for another few minutes and asks her again for the third time. After class, the instructor comes to your office as scheduled and wants to know how you think she did. What do you say?

# Criteria for Review

You are a tenure track assistant professor at a research one university. You received your BS and MS from a small university and work with a consortium whose goal is to increase the research capacity at underrepresented institutions. You are serving on your very first NSF review panel. When you received your packet of 10 proposals to review, you were pleased to note that the packet contained three proposals from the type of institutions your consortium targets. You are also pleased that your initial review places these proposals well in the top half of your group. When your review team meets and shares their initial rankings, you are chagrined to learn that your team members each have those proposals ranked as the bottom three. When you ask for clarification of the ranking criteria, there is initially silence. Then one team member states “You don’t understand - these institutions are not capable of doing the quality of work they say they can.” What should you do?

# Session Recap

We have:

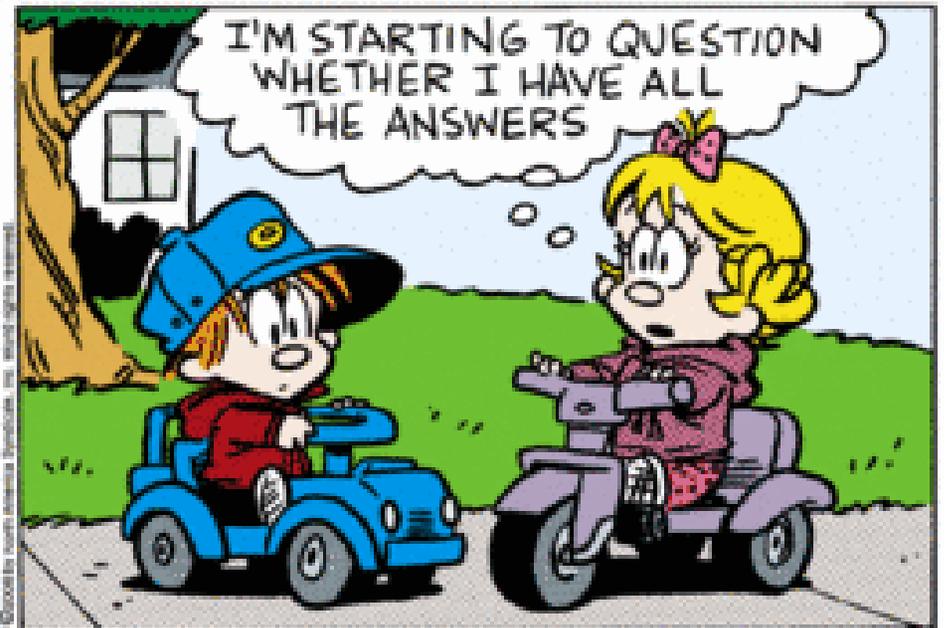
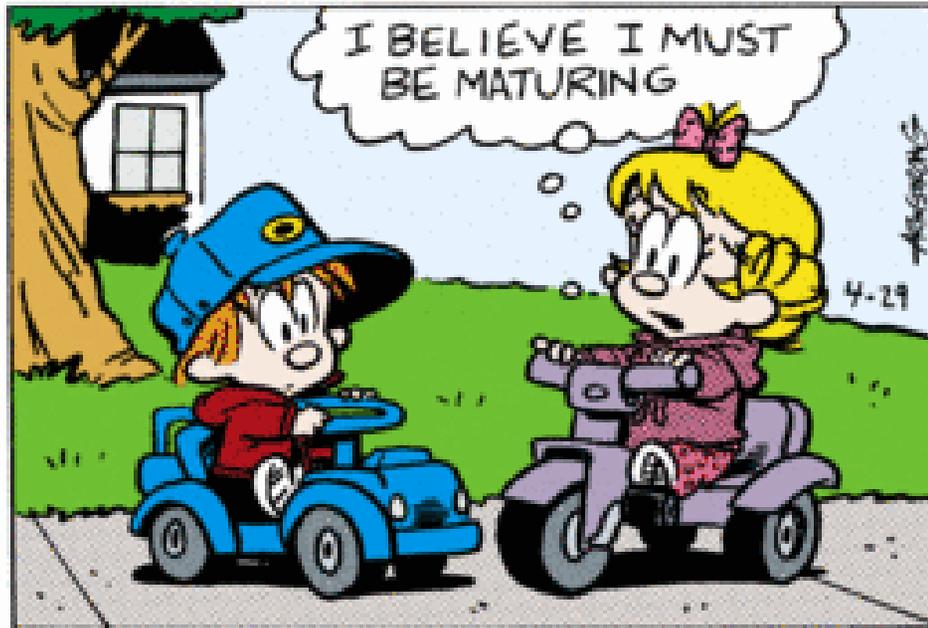
- Reflected on the benefits and challenges of diversity
- Used case studies to discuss aspects of diversity
- Described the research basis for unconscious bias and stereotype threat and discussed the implications of such studies
- Identified various aspects of diversity and articulated possible impacts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

# Closing Reflection

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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
- Diversity Institute Team, Univ. Wis.-Madison  
<http://www.cirtl.net/DiversityResources/>
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- Dr. Robert Lue - Harvard University



**Thank You!**