

DIVERSIFYING ECONOMIC QUALITY: THE ROLE OF LIBERAL ARTS COLLEGES

AALAC CONFERENCE ON ENHANCING INCLUSIVITY IN ECONOMICS AT LIBERAL ARTS COLLEGES
POMONA COLLEGE, CLAREMONT, CA
FEBRUARY 5, 2016

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Swarthmore College
Federal Reserve Board

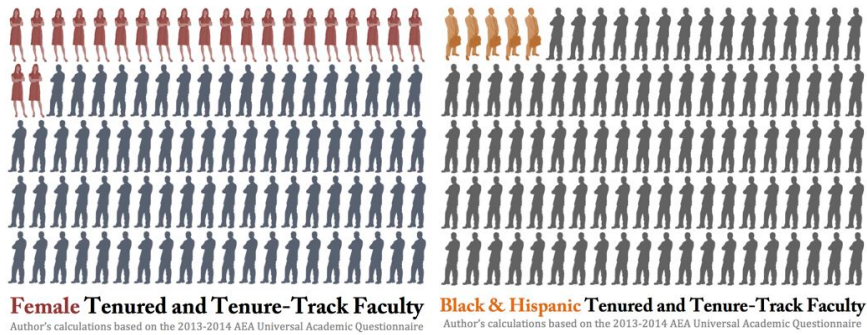
NINE THINGS TO KNOW

I. THE ECONOMICS PROFESSION IS NOT VERY DIVERSE.

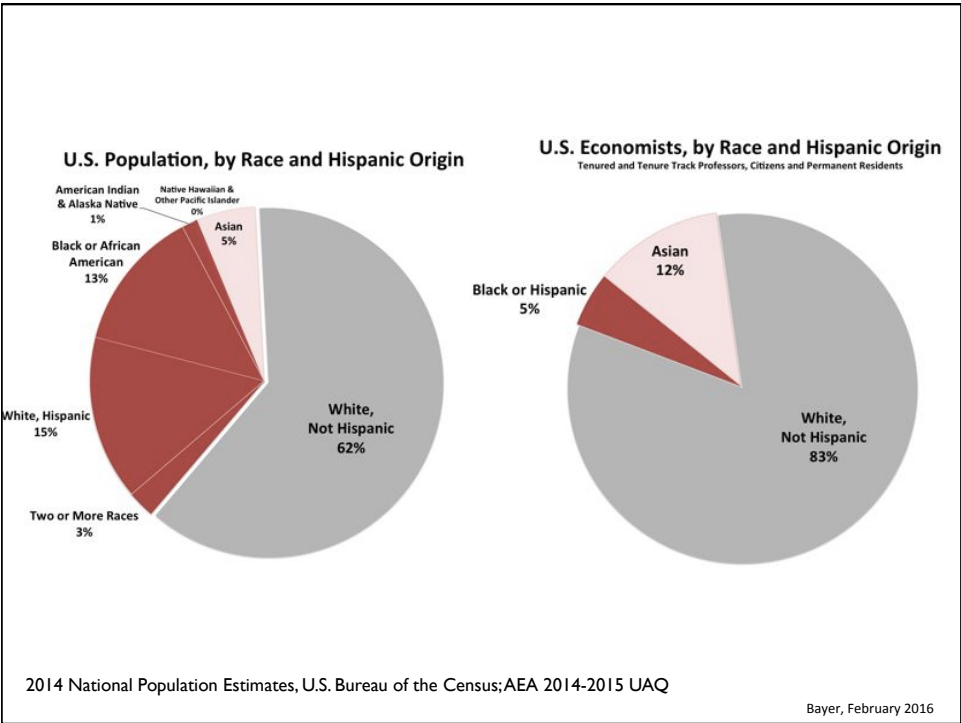
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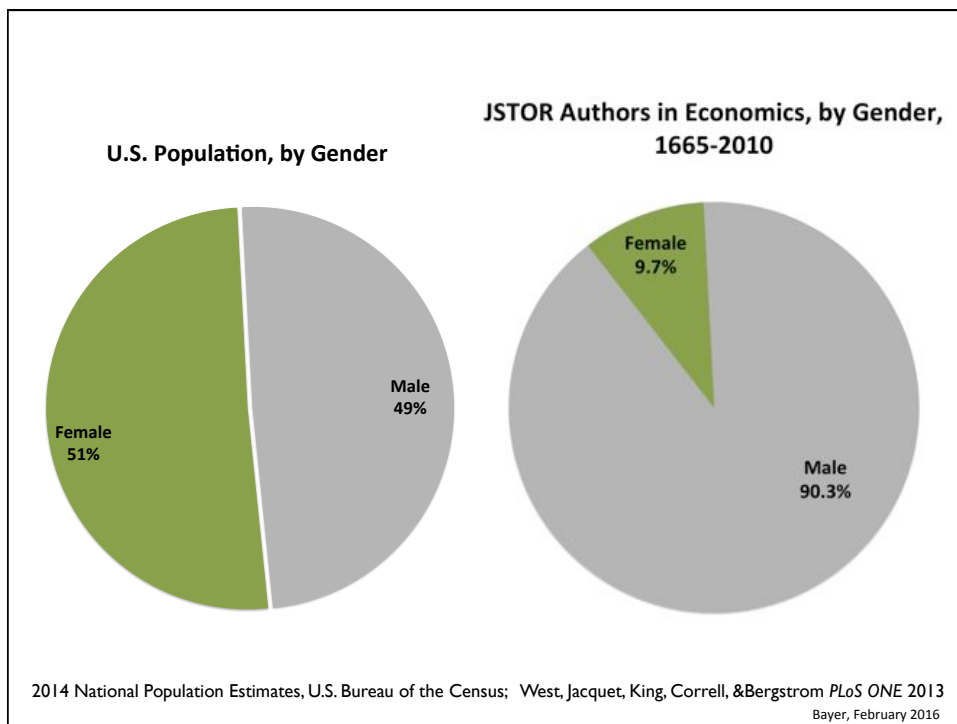
ECONOMISTS

include disproportionately few women and members of historically underrepresented racial and ethnic minority groups



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NINE THINGS TO KNOW

2. THE LACK OF DIVERSITY AFFECTS ECONOMIC KNOWLEDGE AND POLICYMAKING.

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Washington Post

Oscars 2015: No nominations for a single actor of color or female director

The Atlantic

Oscar Voters: 94% White, 76% Men, and an Average of 63 Years Old

Older and more dude-heavy than just about any place in America and whiter than all but seven states



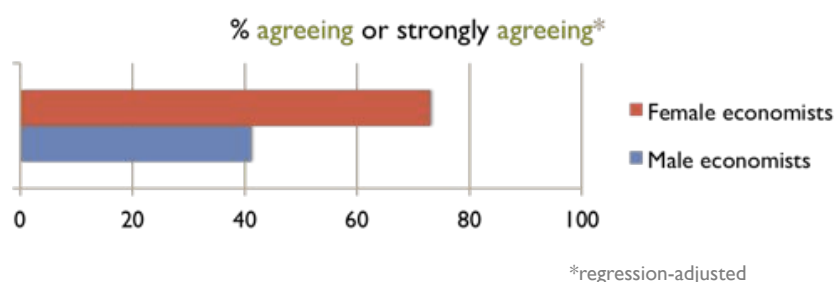
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FROM A SURVEY OF AEA MEMBERS' VIEWS

(May, McGarvey & Whaples 2013)

“The distribution of income in the U.S. should be made more equal.”

☐strongly disagree ☐disagree ☐neutral ☐agree ☐strongly agree



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CONSEQUENCES FOR THE PROFESSION

- Diversity brings a greater range of insights and perspectives

(e.g., Chattopadhyay & Duflo *Econometrica* 2004; Kamas, Preston & Baum *Feminist Economics* 2008; May, McGarvey & Whaples *Contemporary Economic Policy* 2013)

- Diverse groups are more innovative than homogeneous groups

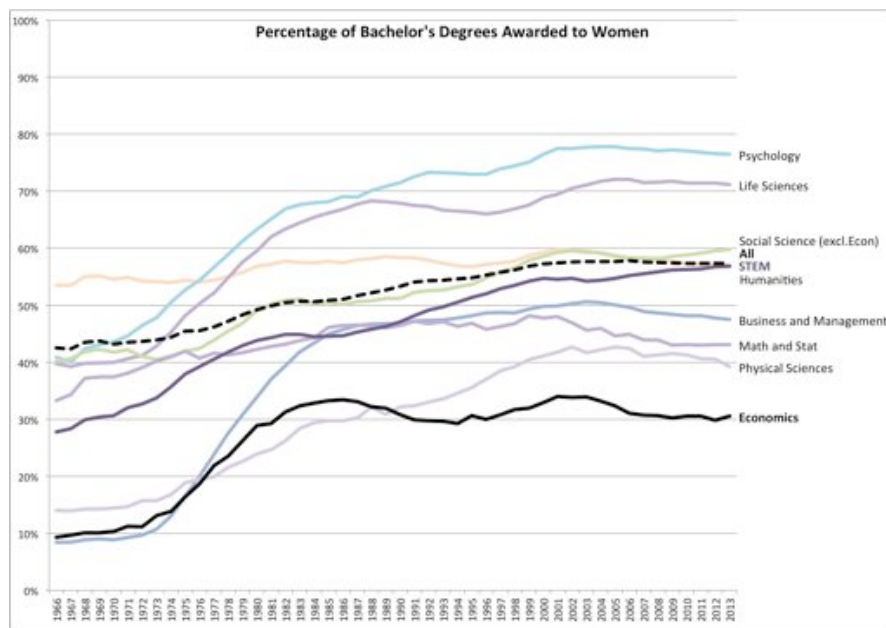
(e.g., Woolley et al. *Science* 2010; Hong & Page *Proceedings of the National Academy of Sciences* 2004; Phillips, Northcraft & Neale *Group Processes & Intergroup Relations* 2006; Hoogendoorn, Oosterbeek & van Praag *Management Science* 2013; Levine et al. *Proceedings of the National Academy of Sciences* 2014; Freeman & Huang *Journal of Labor Economics* 2015)

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NINE THINGS TO KNOW

3. WE NEED MORE DIVERSITY AT THE UNDERGRADUATE LEVEL AND AT LIBERAL ARTS COLLEGES.

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U.S. Department of Education, National Center for Education Statistics; Integrated Postsecondary Education Data System Completions (Washington, D.C.: NCES, 2014). Created with data provided by WebCaspar.

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Students Graduating with BAs in Economics, 2013

| | Percentage of non-URM graduates who are Econ Majors | Percentage of URM graduates who are Econ Majors | Ratio (Column 1 / Column 2) |
|----------------------|---|---|-----------------------------|
| Amherst College | 12.5 | 5.7 | 2.18 |
| Bowdoin College | 17.9 | 5.1 | 3.54 |
| Middlebury College | 13.1 | 7.3 | 1.81 |
| Swarthmore College | 10.6 | 4.3 | 2.43 |
| Williams College | 12.4 | 6.2 | 2.00 |
| | | | |
| Harvard University | 13.3 | 7.0 | 1.92 |
| MIT | 2.8 | 1.9 | 1.46 |
| Princeton University | 11.0 | 10.3 | 1.07 |
| Stanford University | 6.6 | 2.8 | 2.35 |
| Yale University | 11.2 | 7.8 | 1.44 |

URM defined here as Black, Hispanic, or American Indian or Alaska Native. University-level factors (e.g., availability of substitute majors, number of international students,...) explain some of the variation across departments. Calculations using IPEDS data.

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NINE THINGS TO KNOW

4. LIBERAL ARTS COLLEGES HELP SHAPE THE PROFESSION.

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Top American Undergraduate Institutions of Eventual U.S. Economics PhDs
(institution size-normalized), 2008-2012

| | | Number of eventual U.S. economics PhDs | | | Number of eventual U.S. economics PhDs |
|----|-----------------------|--|--|---------------------|--|
| 1 | Williams College | 26* | 15 | Amherst College | 8 |
| 2 | University of Chicago | 43* | 16 | Yale University | 25* |
| 3 | Swarthmore College | 15* | 17 | Austin College | 5 |
| 4 | Harvard University | 77* | 18 | Trinity University | 9 |
| 5 | MIT | 43* | 19 | Wesleyan University | 12 |
| 6 | Macalester College | 14 | 20 | Northwestern | 32* |
| 7 | Reed College | 9 | 21 | Duke University | 25* |
| 8 | Stanford University | 50* | 22 | Whitman College | 5 |
| 9 | Princeton University | 32* | 23 | Knox College | 4 |
| 10 | Centre College | 6 | 24 | Dartmouth College | 16* |
| 11 | Grinnell College | 8 | 25 | William and Mary | 19* |
| 12 | Randolph-Macon | 5 | 26 | Occidental College | 5 |
| 13 | Wellesley College | 14 | 27 | Davidson College | 6 |
| 14 | Carleton College | 10 | *Top 25 in absolute terms (Stock & Siegfried JEE 2015) | | |

NINE THINGS TO KNOW

5. WE CAN CHANGE.



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GRINNELL SCIENCE PROJECT

Components:

- Curricular reform
- Community building
- Student-faculty research
- Pre-orientation

Outcomes:

- In early 1990s, 42 women science majors per year and 8 students of color. By 2008, 90 women and 21 students of color.
- Other students have also benefited from the mentoring and the curricular and pedagogical changes.
- Nearly 70% of the College's science majors enter graduate programs. Grinnell ranks eighth on a per-capita basis in producing science PhDs.

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COMPUTER SCIENCE AT HARVEY MUDD COLLEGE

Components:

- Renamed and revised intro course (fun, relevant, not intimidating)
- Significant exposure to counterstereotypes
- Early research opportunity

Outcomes:

- The number of women computer science graduates quadrupled in six years.

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DiversifyingEcon.org

Navigation: WHO IS MISSING? DOES IT MATTER? INSTRUCTOR PRACTICES DEPARTMENT POLICIES NEW PAGES EVENTS ABOUT CONTACT

Page Discussion Edit History Move Unprotect Unwatch

Diversifying Economic Quality: A Wiki for Instructors and Departments

Diversify at the 2016 ASSAs!

Div.E.Q. is an online resource promoting inclusive, innovative, and evidence-based teaching practices in economics. [\[see more\]](#)

HOW CAN YOU PARTICIPATE?

READ these pages.
TELL others.
SHARE your research and your strategies.
PRODUCE new evidence.

Div.E.Q. is sponsored by the AEA's Committee on the Status of Minority Groups in the Economics Profession.

NEWS: The Chronicle of Higher Education @ features Div.E.Q. as a diversity initiative having success!

Proven practices for instructors

- Foster a growth mindset in your students.
- Offer wise feedback.
- Use active learning techniques.
- Consider the impact of wait time.
- Employ technology wisely.
- Avoid stereotype threat.
- Use cooperative learning.
- Promote inclusive communication.
- Provide students with rubrics.
- Incorporate service learning.
- Join the Wikipedia Education Program.
- Flip your classroom.
- Provide opportunities for involvement with research.

Encourage students to apply to the AEA's Summer Training Program. Deadline: January 31, 2016

Proven policies for departments

- Actively recruit students who may be underprepared, unsure, or unaware.
- Advertise the broad array of careers and research areas in economics.
- Encourage peer and faculty mentoring.
- Utilize summer bridge programs.
- Offer a course on Race, Ethnicity, and Gender in Economics.
- Alter the introductory textbooks.
- Recruit and retain a diverse faculty.
- Educate faculty.

Change how the world sees us.

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NINE THINGS TO KNOW

6. WE CAN CHANGE THE IMPACT OF OUR IMPLICIT BIASES.

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IMPLICIT VS. EXPLICIT BIASES

| | Implicitly biased | Implicitly unbiased |
|---------------------|-------------------|---------------------|
| Explicitly biased | A few | NA |
| Explicitly unbiased | Most of us | A few |

Decades of careful research indicate that race, gender, and other perceived group affiliations operate as heuristics, with powerful, unconscious effects on our judgments and actions. (e.g., Greenwald & Banaji 1995)

We all have biases that operate without our awareness or intent.

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WHERE EVERYONE WANTS TO BE AN ICON



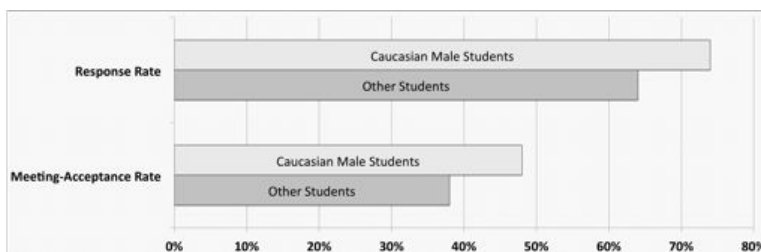
Great Jobs. Great Candidates. Life-Changing Connections.
Building Careers in Economics for Over 50 Years

AMERICAN ECONOMIC ASSOCIATION

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A FIELD EXPERIMENT SET IN ACADEMIA

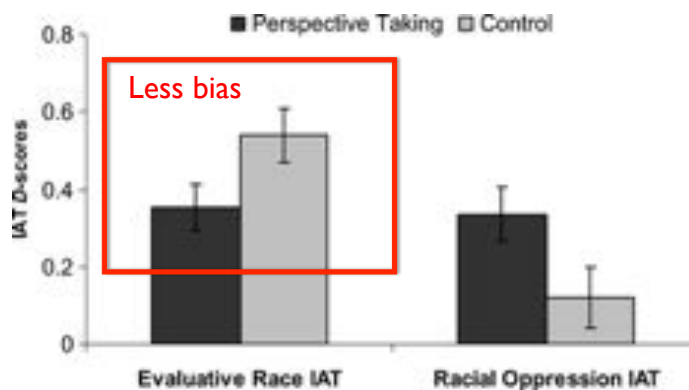
- Subjects—6,548 faculty in 89 disciplines at 259 universities—received an email from a prospective doctoral student requesting a brief meeting.
- The gender (male, female) and race (Caucasian, Black, Hispanic, Chinese, Indian) of the student, as signaled by the name, was randomly assigned.



Milkman, Akinola, and Chugh, "What Happens Before? A Field Experiment Exploring How Pay and Representation Differentially Shape Bias on the Pathway into Organizations (April 23, 2014). Available at SSRN: abstract=2063742.

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BIASES CAN BE MODIFIED...



“Perspective taking combats automatic expressions of racial bias”

(Todd, Bodenhausen, Richeson, Galinsky *Journal of Personality and Social Psychology* 2011)

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BIASES CAN BE CONTROLLED...

Orchestrating Impartiality: The Impact of “Blind” Auditions on Female Musicians

September 2000, *American Economic Review*, 90(4): 715-741

By CLAUDIA GOLDIN AND CECILIA ROUSE*

A change in the audition procedures of symphony orchestras—adoption of “blind” auditions with a “screen” to conceal the candidate’s identity from the jury—provides a test for sex-biased hiring. Using data from actual auditions, in an individual fixed-effects framework, we find that the screen increases the probability a woman will be advanced and hired. Although some of our estimates have large standard errors and there is one persistent effect in the opposite direction, the weight of the evidence suggests that the blind audition procedure fostered impartiality in hiring and increased the proportion women in symphony orchestras. (JEL J17, J16)

Sex-biased hiring has been alleged for many occupations but is extremely difficult to prove.

Drawing from the seminal contributions of Gary Becker (1971) and Kenneth Arrow (1973), has

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7. WE CAN CHANGE OUR RULES AND HABITS.

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“Neutral” practices can produce disparate impact. (Haney
Lopez *Yale Law Journal* 2000, Bayer 2013)

For example,

- Voter ID laws
- Staircases on college campuses
- Rigid pathways into the major
- Habits in the classroom
 - e.g. the kinds of examples we use or the people we call on in class

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NINE THINGS TO KNOW

8. WE CAN CHANGE OUR TEACHING.

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WHAT ARE OUR PROFESSION'S HABITS IN THE CLASSROOM?



- **We love to lecture.** (Watts & Schaur *The Journal of Economic Education* 2011)
- **References to “gender, race, and ethnic issues” are rare.** (Ibid.)
- **Most economists are either not aware of alternative teaching methods or think preparation is too time consuming.** (Goffe & Kauper *The Journal of Economic Education* 2014)
- **There is solid evidence that other methods are more effective than lecturing.**

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INCORPORATE ACTIVE LEARNING

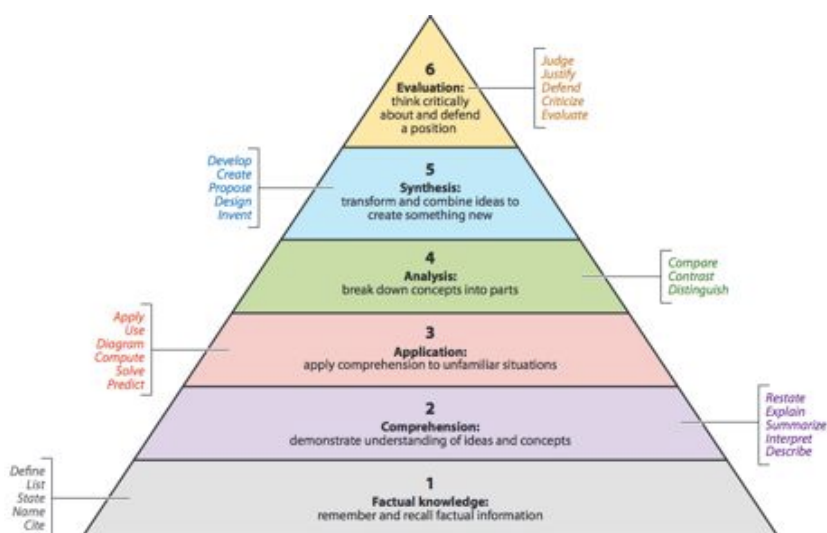
- ✓ Engage students in higher order thinking with in-class inquiry and problem-solving activities.
- ✓ Use Think-Pair-Share.
- ✓ Share Bloom's taxonomy.

Active learning produces strong increases in student performance. (Freeman et al. *Proceedings of the National Academy of Sciences* 2014)

Research in STEM fields finds disproportionate benefits for students from disadvantaged backgrounds and for female students in male-dominated fields. (Lorenzo, Crouch & Mazur *American Journal of Physics* 2006)

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BLOOM'S LEVELS OF UNDERSTANDING



32

Figure from Wood, 2009. *Ann Rev Cell Dev Bio*

FOSTER A GROWTH MINDSET

- ✓ Intelligence is not a fixed trait.
- ✓ Intelligence expands through effort, mistakes, and perseverance.
- ✓ Math ability and economic intuition can be developed.

Encouraging students to see intelligence as malleable raises academic enjoyment, engagement, and performance.

(Aronson, Fried & Good *Journal of Experimental Social Psychology* 2002)

Teachers with growth mindsets allow a broader range of students to do well. (Rheinberg, 2000, Dweck, 2008)

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NINE THINGS TO KNOW

9. WE CAN CHANGE OUR OUTREACH.

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DEPARTMENT OUTREACH

- Counter stereotypes
 - of who does economics
 - of what economics is
- Actively recruit students
 - to take a first course
 - to continue in the department
- Offer research opportunities
- Build community

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In sum, we can enhance inclusivity through

- addressing implicit bias
- examining rules and habits
- improving our classes
- Increasing outreach

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