You’re Different—Does it really matter?

• In 1970, 3rd grade teacher, Jane Elliot, gave her class a lesson on discrimination.
• On Tuesday, she gave the blue-eyed children privileges and told them they were superior to the brown-eyed students
• On Wednesday, she made the brown-eyed children the superior group.
You’re Different—Does it really matter?

• Jane Elliot performed the same exercise the following year.
• This time, she gave the students a spelling test:
  • 2 weeks before the experiment
  • 2 days of the experiment, and
  • 2 weeks after the experiment
You’re Different—Yes, it does matter

• The children improved their original scores on the day they were superior, and their scores decreased on the day they were inferior to the other children.
• The scores 2 weeks later (following the discrimination exercise) were all improved from the original scores.
People can be classified into many different groups.

- Age
- Gender
- Religion
- Race/Ethnicity
- Social Class
Developmental Trends in Gender Typing

- **2½ - 3 yrs:**
  - Firmly label themselves as boys or girls, taking the first step in the development of gender identity
  - Learn gender-role stereotypes
  - Gender can change based on superficial characteristics

- **5 and 7 yrs:**
  - Gender is an unchanging aspect of self
  - Construct such aspects of gender identity
    - How gender typical they are
    - How content they feel about being a male or a female

- [http://www.youtube.com/watch?v=VZb2len6f18&feature=related](http://www.youtube.com/watch?v=VZb2len6f18&feature=related)
Developmental Trends in Gender Typing (con’t)

• 10–11 yrs:
  • children’s stereotyping of male and female personality traits similar to that of an adult

• Stereotype rigidity
  • Preschoolers - stereotypes are viewed rigidly as obligatory prescriptions
  • Middle childhood - children become more flexible in their thinking about gender during
  • Adolescents - becoming somewhat more rigid once again during the period of gender intensification

• Ultimately, child’s attitudes become more reflective of their parent’s attitudes
Gender Stereotypes

• **Factors that create stereotypes** – Bigler’s red/blue t-shirt groups found that children tend to develop bias
  • Authority figures label the groups (e.g. "Good morning, red and blue group!")
  • Use them to organize daily activities
  • Other factors: perceptual salience, segregation, and minority status

• Stereotypes cause children to **forget or distort counter-stereotypic information**
  • Role models are important
  • Messages we send about gender are important
What are the messages that we receive?

• What message do we send about technology and computing?

What message do we send about females in technology?

• Parents
• Media
• Schools
• Products and stores
What do we need to remember?

• Overall, what our role models teach us is the **strongest influence** on how we think about stereotypes

• **Parents** (who DO listen to teachers)

• **Teachers**

Other influences:

• **Peers**

• **School Culture**
Stereotype Threat is the threat of being viewed through the lens of a negative stereotype or the fear of doing something that would inadvertently confirm that stereotype.

Subtle Effects are NOT!
Stereotype Threat

Situation in which you might confirm a negative stereotype about your group

Anxiety, cognitive load

Performance Suffers

Important!!!!

You do NOT have to believe in the stereotype is true is experience stereotype threat!

You simply need to believe that other people hold a stereotype of your group.
Stereotype Threat Leads to:

- Lower test performance
- Lower expectancies and self-confidence
- Less interest in math, science, and leadership
Stereotype Threat Leads to Underperformance

Group of female and under-represented minority (URM) students with high SAT math scores

Remind group A of race or gender before taking exam

Underperformance compared to control group

Give them same math exam

Tell group B that exam has no gender or race bias

Same performance compared to control group
Subtle Exposure to Gender Stereotypes can Affect Women’s Career Preferences

Women watch TV ads showing:
- Counter-stereotypic women (a woman talking intelligently about health care)
- Stereotypic (drooling over brownies)
Subtle Exposure to Gender Stereotypes can Affect Women’s Leadership Preferences

Similar findings when women were asked what type of leadership role they wanted to take while working in a group.

- Females – Project Managers
- Males - Coding
Stereotype Threat among Black & White Men in Sports

Not limited to women or minorities!

- **Task**: Playing mini-golf (more strokes = poorer performance)
- **Stereotype Threat conditions**
  - “Task requires natural sports ability” (threat to white males)
  - “Task requires athletic intelligence” (threat to black males)
Stereotype Threat among Black & White Men in Sports

- White Participants
- Black Participants

Sports Intelligence
- White: 26
- Black: 23

Natural Ability
- White: 29
- Black: 28
Features of stereotype threat:

1. Affects members of any group about whom there exists some negative stereotype.
2. One must care about the domain or behavior that the stereotype describes. (Domain Identification)
3. Different groups experience different degrees of threat depending on the content of the stereotype and the situation.
4. One need not believe in the stereotype for it to be threatening.
How Do We Reduce Stereotype Threat?

• The Fluidity of Intelligence
  • There exists the idea that intelligence and ability are fixed;
    • e.g., either you are good at math or your are not
  • Is it? NO!!!!
• We need to emphasize that Effort is what matters
  • Wise criticism
Wise Criticism

• What is Wise Criticism?
  • Criticism in which you explicitly tell the student that you think they are capable of attaining a high level of success and achievement—helps students feel less defensive and less threatened.
  • Use wise criticism to create trust and build higher self-esteem
  • Helps develop an internal locus of control
  • Remind them: Everyone faces doubts about performance & Learning is an incremental process
UNDERSERVED PRAISE

This is a good score for you! You should be pleased.

BAD CRITICISM

Yeah, you'll need to try harder than that if you want to pass my class.

NO FEEDBACK

She thinks I'm an idiot. I knew I didn't belong here.

WISE CRITICISM

You nailed the titration questions, so I know you can do well on tough material. You're having a tougher time with thermochemistry. Let's talk about what you can do to improve.
Wise Criticism Exercise

Share an example of a time when you were given “constructive” criticism in a negative way. How did this affect your performance? Propose a “wise” way to phrase it.

Or

Share an example of a time when you were given wise criticism that helped you reach a higher level of achievement.
Other Ways to Reduce Stereotype Threat

- Role models like ‘me’
- The presence of people like ‘me’ (e.g., gender balance in the room)
- Pleasant and welcoming physical space
- Do not call attention to minority status or gender
  - Talk about it if it comes up, but don’t bring it up even in subtle ways
Final Exercise

• Make a list of things that you have done in the classroom or with your students that might have induced stereotype threat
• Make a list of things that you have done that might help reduce stereotype threat

• At the end of the workshop – take your lists and make connections between the ideas & approaches we talk about in our other talks and combating stereotypes & stereotype threat