Stereotype Threat and Academic Learning

Jennifer Schneider, PhD
Institutional Research Planning & Effectiveness

May 16th, 2018
Achievement Gaps: First Generation

Second Fall Persistence (2016)
- FG: 78.3
- Non-FG: 85.1

4 Year Graduation Rate (2013)
- FG: 38.4
- Non-FG: 47.1

6 Year Graduation Rate (2011)
- FG: 58.4
- Non-FG: 71.4
Achievement Gaps: Racially Minoritized

- Second Fall Persistence (2016): RM 80.1, Non-RM 84.7
- 4 Year Graduation Rate (2013): RM 38.0, Non-RM 46.8
- 6 Year Graduation Rate (2011): RM 59.7, Non-RM 70
Achievement Gap: Pell Recipients

Second Fall Persistence (2016)
- Pell: 79.2
- Non-Pell: 84.7

4 Year Graduation Rate (2013)
- Pell: 38.1
- Non-Pell: 46.9

6 Year Graduation Rate (2011)
- Pell: 60.8
- Non-Pell: 70.3
Accumulated Advantage

Our Education System

FOR A FAIR SELECTION EVERYBODY HAS TO TAKE THE SAME EXAM: PLEASE CLIMB THAT TREE
Accumulated Advantage

Over time, small differences = big gaps
First Time Students’ Perceptions and Experiences

- 46.5% of students agree they are having difficulty in their current classes
  - 51% of first generation students

- RM (37%) students report interacting with instructors less often than non-RM (43%) students

- Half of men compared to a third of women rate themselves as very or extremely good at math

- 40% of non-FG students rate themselves as very or extremely good at taking tests compared to 32% of FG students
CSU Students Psychosocial Data

• First generation students report lower emotional states of mind, social adjustment, and perceptions of flourishing while also having more financial concerns and levels of homesickness.

• Racially minoritized students report lower emotional states of mind and commitment to staying at CSU while also having more financial concerns.

• Pell recipients have lower scores for emotional state of mind, commitment to staying at CSU, social adjustment, and perceptions of flourishing and report higher financial concerns.
Stereotype Threat

- Being at risk of conforming to a negative stereotype about one’s group (Steele & Aronson, 1995)
  - Impacts academic performance
  - Thought to be situational, performance-based phenomenon
  - Mediated by salience of social identity, evaluative scrutiny
Consequences of Stereotype Threat

• Prevents students from performing up to their full ability
• Alters major and career aspirations
• Contributes to inequality of groups
• Impacts how people approach learning/tasks
  – Disengagement
  – Internalize failure
  – Task discounting
  – Decreased motivation
  – Decreased sense of belonging
  – Lowers expectations for performance
  – Reduction of effort

Stone, 2002; Schimel, Arndt, Banko & Cook, 2004
Stereotype Threat’s Impact on Learning

• Impact on performance related to interference with working memory (Steele and Aronson, 1995; Schmader and Johns, 2003)

• Prevents perceptual learning (Rydell et al., 2010)

• Note taking (Appel et al., 2011)

• Impairs skill building abilities (Taylor and Walton, 2011)
Reducing Stereotype Threat in the Classroom

• Reduce threatening cues (Cheryan et al. 2009)

• Increase sense of belonging
  – Role models

• Mindset
  – Encourage students to think about intelligence as expandable

• Values affirmation (Cohen, Garcia, Apfel, and Master, 2006; Cohen et al., 2009; Miyake et al., 2010)
  – Recognize students as multi-faceted and complex

• Student/faculty interactions (Lundberg & Schreiner, 2004)
  – Constructive feedback (Cole, 2008)

• Task reframing
  – Change descriptions of tasks to minimize relevance of a stereotype

• Normalize difficulties