Improving Diversity in Engineering

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Overview

- **Privilege**
  - Understanding unequal playing field and its effects on diversity.

- **Socialization**
  - Recognizing implicit bias.
  - Recognizing stereotypes and their threat to diversity.

- **Improving Diversity**
  - How to overcome these negative obstacles to create a more diverse environment.
  - Becoming an ally.
Privilege: Do Each of Us Have a Fair Start?

- **Definition:** A special advantage enjoyed by an individual or group.
- Privilege or an uneven playing field negatively affect students and adults.
- Examples will be discussed to reveal a negative and compounding output that diminishes diversity in engineering.
Privilege Leads to Disparity of Diversity

- For students: **accessibility is privilege**
  - 55% of CA high schools do not offer enough college prep classes to allow all students to enroll.
  - Schools with high Latino/a and African American populations have fewer of these classes.
  - Conclusion: Underrepresented students in low-resource schools who are denied access are disadvantage from the start.

- For adults: **the current structure is exclusive**
  - General activities and organizations for the minority may be labeled as “self-segregation” and “exclusive” by the dominant group.
  - Conclusion: Many structures exclude the minority group, making it comfortable solely for the dominant group.
Implicit Bias: Subconscious beliefs that effect our decisions and behaviors without our knowledge.

According to Implicit Association Tests:
- 75% Whites favor whites over blacks.
- 70% Test takers favor straight over gay.
- 80% Test takers favor young over old.

These prejudices can undermine our conscious intentions, and lead to hostility or lack of trust in the work environment.
Socialization: Stereotype Threat

- Stereotype Threat: Being at risk of confirming a negative stereotype.

- Stereotype threat can lead to:
  - Decreased Performance.
  - Ironic Effect.
  - Self Handicapping.

In conclusion, stereotype threat yields no positive effects.
Overcoming Negative Obstacles

Privilege:
- Acknowledge the majorities privilege rather than the minorities lack there of.
- The “best and the brightest” may all think alike.

Implicit bias:
- Recognize biases.
- Actively work to overcome them.

Stereotype threat:
- Stereotyped individual should seek a role model that suffered from the same stereotype.
- Work hard to prove the stereotype wrong.
Diversity = Advancement

Overcoming implicit biases and stereotypes is critical in furthering diversity in Engineering.

By becoming knowledgeable about these hindrances, you have taken the first step to overcoming them!