How Stereotypes and Uneven Playing Field affects Diversity in Engineering

2011 PEERs Seminar
Brief Outline

• Social Identity

• Stereotypes and Belonging

• Uneven Playing Field
  Meritocracy
  Education Opportunities

• Bringing it all together

• Conclusion
Don’t be limited by your ethnic, religious or social group
Prof. Nancy Hopkins became a member of the National Academy of Sciences (NAS)
Case Study: Academic Performance

Kent-Meridian High School
Ranking not available

10. International School (Bellevue, Wash.)
Top 10 best High school in the United States

Demographic

Source: Washington State Report Card
Primed mindset affects thoughts and performance

55.6 % Accuracy

Trivial Pursuit Board Game
Design: Scott Abbott & Chris Haney, Manufacturer: Hasbro, Date: 1982

42.6 % Accuracy

University Professor

West Ham fans brawl with Columbus Crew as football hooliganism hits the US. July 2008 in Columbus, Ohio
Stereotype
Definition of Stereotype

A simplified and standardized conception or image invested with special meaning and held in common by members of a group.
Stereotype Threat

The risk of confirming a negative stereotype about one’s group as self characteristic
Stereotype Threat

Our sub-conscious thoughts of prejudice can affect performance
Stereotype also prevents diversity in engineering field.
Benefits confined to others based on some factors that is beyond their control e.g. birth order, origin, race, natural ability etc.
Meritocracy
Early Influence of Meritocracy

- How we were raised
- Perception of Meritocracy
- Work hard and you will succeed
Equal Education Opportunities?

Private School vs. Public School

The Junior Meritocracy

Where will you end up?
Bringing it all together
People often hold implicit or unconscious assumptions that influence their judgment.
Gender

Race

Disabilities

Sexual Identity
• Mental housekeeping

• A role model to look-up to

• We should stop portraying boys as more innately gifted in math than girls

• Think and Focus on “Performance” not “Social Identity”
Spread the word

“Diversity in Engineering” = “Solution to Big Engineering Problems”