

Discussion about inclusiveness in CSci

UMM CSci

October 5, 2015

Why talk about inclusiveness?

COMPUTER SCIENCE: **Where are the girls?**

There will be 1.4 million computing-related jobs open by 2020 and at current graduation rates for computer science, two thirds of them will go unfilled. Girls represent a valuable, but mostly untapped, talent pool.

GIRLS COMPRISE:



of all Advanced Placement (AP) test-takers are girls



of all AP Calculus test-takers are girls



of all AP Computer Science test-takers are girls

WOMEN EARN:



of all undergraduate degrees



of all undergraduate math and statistics degrees



of all undergraduate physical sciences degrees



of all undergraduate computer and information science degrees

SOURCE: National Center for Women and Information Technology, U.S. Department of Labor

DESERET NEWS GRAPHIC

Two videos

What is the issue?

The Underrepresentation of Women in STEM, by Chelsea Ziadle

A story of a woman engineer:

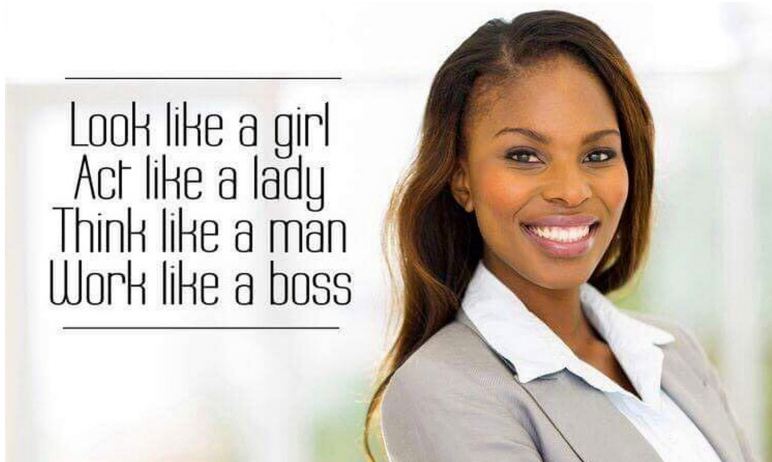
Inspiring the next generation of female engineers: Debbie Sterling at TEDxPSU

Similar problems are faced by ethnic minorities or anyone else who doesn't look like a stereotypical person working in a tech field.

#IlookLikeAnEngineer twitter campaign

Well-meaning attempts to get underrepresented groups into tech.....

South African pen manufacturing company Bic posted this ad on its Facebook page to celebrate national women's day:



<http://www.theguardian.com/society/2015/aug/11/look-like-a-girl-think-like-a-man-bic-outrage-south-africa->



Study shows gender bias in math grading

- *A study by Victor Lavy of the University of Warwick in England and Edith Sand of Tel Aviv University (2015).*
- Three groups of Israeli students, grade 6 to end of high school.
- 2 math exams: one graded by outsiders not given the students' names, the other by teachers who knew their names.
- In the exam graded anonymously, girls outperformed boys.
- In the exam graded by teachers who knew their names, boys outperformed girls.
- There was no similar effect in other areas (e.g. language).
- Studies show that belief in one's abilities greatly increases performance.
- Since girls aren't expected, or encouraged, to do well in math, they perform worse or drop out.
- The teachers in the study were women.

Starting points for group discussion

TBA