The Effect of a Deliberately Merged Program for Women and Minorities in Engineering

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Dr. Laura Bottomley, Teaching Associate Professor of Electrical Engineering and Elementary Education, is also the Director of Women in Engineering and The Engineering Place at NC State University. She has been working in the field of engineering education for over 30 years. She is dedicated to conveying the joint messages that engineering is a set of fields that can use all types of minds and every person needs to be literate in engineering and technology. She is an ASEE and IEEE Fellow and PAESMEM awardee.

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Effects of a Deliberately Merged WMEP Program

NC State University
Why Merge?

- Historically, both a Women In Engineering Program and a Minority Engineering Program operated.
- Many programs were similar: bridge programs, mentoring, evening programs.
- Conflicts existed for women of color.
- Industry sponsors were conflicted.
Preparations

- Student focus groups
- Industry advisory board
- Joint programming
Effects on Programming

- Intersectionality is naturally a part of the design consideration for programming ......
  - Side by side bridge programs
  - Many joint programs
    - Tools Workshop
    - Taste of Engineering
    - Alternative spring break in Rwanda
  - Wednesdays with WMEP
Work with Professional and Student Staff

- Book Study
- Departmental meetings
- Changes in departmental practices
- Changes in recruitment approaches
Collaborative K-12 Outreach

Working together, we place role models in the forefront who represent the population of children participating.
• Responsibility is shared across more of us.
• We work together to devise and implement programs.
• Students have a range of staff to consult
• Picture of space, which would prevent blind review

Effects on us
Percentage of Women in First Year Cohort

Percentage of Underrepresented Minorities in First Year Cohort

By the numbers
Distribution of Women Across Departments

Percent Women by Discipline
Percentage of Entering Class Retained to Second Year


All Women  All Men  AA Women  AA Men
“We live what we seek to become.

“Intersectionality and inclusivity become habits, not special programs.