ADMISSION OF WOMEN INTO UNDERGRADUATE ENGINEERING SCHOOLS: AN INSIDER'S VIEW

Marilee Jones, Associate Director of Admissions
Massachusetts Institute of Technology, Cambridge, Massachusetts

This paper is a review of the first meeting of the Admissions Division of WEPAN held at this year's annual conference. I chaired a panel made up of Richard Hale, Director of Admissions at Cornell, Martina Hahn, Dean of Admissions and Alumni Affairs at U. of Miami School of Engineering and Patricia Coleman, Dean of Admissions and Financial Aid at Harvey Mudd College. The session was interactive, designed to be an information exchange about the topics detailed below.

History

The panelists had attended the previous two WEPAN conferences and saw a need for admissions people to use WEPAN as a forum for discussion of our unique dual role as 'gatekeepers' and visionaries. Although faculty are the core of any school, admissions personnel are the school's direct link to the world and to its future, and as such must be aware of changes in education, the economy and demographics, all of which directly affect a school's future welfare. We felt that we would like to meet to see how well other institutions are admitting women, to see what works and what doesn't and to decide ways that we can collaborate on the common goal of attracting and admitting more females into engineering.

Goals

Our panel had two goals in mind for this conference session:

1. that everyone attending would leave with at least one new idea for (ultimately) admitting more women. For example, Kathleen Stacey, Assistant Director of Admissions at RPI, went away from last year's conference with an idea to do something with junior high school girls. She organized a science day event at RPI (partially sponsored by GM) for 150 6th grade girls and their teachers in the Capitol District area.

2. to set up a network of admissions people nationwide who will talk together and team up for regional projects. E-mail will be the main mode of communication.

Format

The issues discussed were classified under four categories: recruitment, selection, yield and retention. The following questions were asked:

Recruitment:
* How do we educate girls and their families about what engineering actually is?
* Do we use gender specific literature? If yes, how do we know if it is effective?
* What is our experience with pre-college programs? Do we see their effects?
Recruitment:
- What are the most effective recruitment strategies for women?
- Does anyone do junior high school outreach?

Selection:
- How do we use standardized tests?
- Do our admissions requirements limit the women we can select?
- Do we act 'affirmatively'? How effective is this?
- How do we handle context cases?

Yield/Financial Aid
- What are the trends in yield?
- How has financial need affected yield?

Retention:
- Are there any linkages between admissions staff and deans?
- What kind of feedback do we get on admits and how is that feedback factored into future decision making?

Conclusions/Recommendations
Several conclusions were drawn as a result of the session:
- there are very few efforts made by admissions offices to educate their clientele about the nature of engineering as a profession.
- it appears to most of us that gender-specific literature is more likely to be a turn-off to adolescent girls these days.
- there is a wide spectrum of experience with pre-college programs, but little effort by admissions people to check their effectiveness as a recruitment tool.
- the most effective recruitment strategy for women is to have current undergraduates personally contact those we wish to attract.
- standardized tests are not always used as they were designed.
- a number of schools act 'affirmatively' on their female candidates, very much like they do with their minority students.
- many schools have some mechanism for correlating future performance with admissions factors. This correlation is rarely as simple as it seems.

Several recommendations were also made:
- we admissions people of WEPAN survey schools not represented at the conference on the same points listed above.
- we consider the possibility of math/science teacher regional conferences hosted by WEPAN schools and sponsored by industry. These should include community college teachers.
- we make presentations at other national professional conferences (NACAC, NSTA).