



Women in Science and Engineering: What the Research *Really* Says

A panel discussion co-sponsored by WISELI and the Science Alliance.

Thursday April 14, 2005

Biotechnology Center Auditorium, University of Wisconsin – Madison

Panel discussion with Molly Carnes and John Wiley

Closing remarks by Jo Handelsman

Audience: This isn't gender-based but ... is it possible that perhaps there's other societal differences between populations that result in this higher failure rate – perhaps they don't have the financial resources to go through college?

J.W.: Let me be clear, it's not a failure rate. It's a lack of graduation. The overwhelming majority of the students who leave here without a degree leave in good academic standing. They were not flunking. They just gave up and left. And some of it undoubtedly is financial but we've been closing that gap systematically over the last ten years. It's getting smaller every year and it will eventually disappear.

Audience: Thank you.

Audience: You've been able to track – it's very hard to track when people leave. Could it be [that] they still graduate they just leaving here because of the climate and going to a more climate-friendly university?

J.W.: Yes. Of the twenty percent – we've only recently begun doing exit interviews and they're very difficult and very expensive because students don't tell you they're about to leave, they just disappear and then you have to go find them. But of the twenty percent who don't graduate, fifteen of the twenty do eventually graduate. Either they leave here and then come back later and graduate or they go to another school and graduate. It's only about five percent in the end that don't graduate from anywhere as far as we can tell. {pause} Which tells me also that we're very, very good at picking students who can graduate. Our freshman class, they're all capable of graduating. And the five percent, my guess is most of them get into trouble with alcohol. It's overwhelmingly the biggest health, safety and academic problem on this campus.

Audience: I'm not sure about her question, I'm just curious about as related to ... eighty percent was that the majority and then the twenty percent were not? Was that compared to the minority situation on this campus?

J.W.: No, what I said is I don't have that breakdown just for the minority students only for the overall. Jocelyn, do we have those data [asking someone in the audience]?

Jocelyn: Well the recent analysis that we did showed [sic.] that of any breakdown group, about forty-six percent will graduate somewhere else within the six-year period. The continuation rate for minority students is higher than for majority students. So we see it's a longer tail. So, if we go out eight or ten years you start to see the gap close quite a bit but at six years no matter what ...

Audience: So, you cited a study where the letters of recommendation [exhibited] ... a terrible bias. But it is now known that at least here we have a much better representation of women in the jobs where they are writing recommendations for the new applicants. Is there anybody who has gone back and looked now at those data? [Has anyone found] less bias now [that] there's more women writing recommendations for women for the new jobs? Are they treating their women colleagues better and have the biases disappeared?

M.C.: So the question related to the study by Trix and Psenka wondering if now that we're all aware of this bias if there's been a change in the letters of recommendation. Nobody's repeated the study, it just came out in '03. Also, the question that's usually asked, which I think you were getting at: were there differences in the gender of the letter writer? And the authors wanted to look at that but because there were so few – remember letters are usually by the chairs, the deans – there were no women! So it was an N issue, they really couldn't compare it. Maybe one or two of the letters were written by women but not enough to really compare.

J.W.: I'll give you another anecdote which I find also very telling. When Virginia Henshaw was the Dean of our Graduate School, one of the research centers in the graduate school that reports to her did a search for a new director. And they brought her the short-list of candidates, handed it to her and she looked at the list, handed it back and said, "Do the search over." Because it was five finalists, all male. And she said, "I know this field perfectly well and I know there are lots of accomplished women out there who we're even asked if they would be interested in this job. You haven't mined the full potential pool of new directors. So you haven't done your job. I'm not saying these are unqualified to be the director and I don't care whether the next director is male or female. But I want to be confident that you've really looked everywhere you need to look." So they went away with their tails between their legs and did the search over. [They] came back with another short list. As I recall, it was also five, and I think it was two women and three men. And the committee told her that of this short list of five, one of the women was very clearly their first choice and vastly superior to everyone else on that list and the previous list. You've got to be persistent.

J.W.: All you have to do is take a look at the Madison public school system to begin to get a clue. Boys disproportionately are not being prepared for college. This is a problem. This is a different kind of gender gap. But right now in the Madison public schools, twenty percent of the students are referred to special education, which was designed originally to take care of physical handicaps and other learning disabilities – physiological and mental learning disabilities. I don't believe and I don't think most people believe and I don't believe they can demonstrate to my satisfaction that twenty

percent of our kids are learning disabled. Now these twenty percent are almost entirely boys and they're eighty percent minority boys. And they will not be freshman at this institution when they graduate high school because they won't have been prepared. They're being referred into special education because they do stuff that all the guys in this room did when they were in school. They act up, they don't pay attention, they fidget, they throw spitballs, they're behavior problems. And they're being referred into special education and failing to thrive. This is a societal problem that we also need to pay attention to.

J.H.: Well on that note, I'd like to thank all of our speakers and also Tom Ziegelhoffer and the Biotech Center and the Science Alliance for sponsoring tonight's panel.