

From Individual Actions to Institutional Change

Leadership Education for
Advancement and Promotion
The **LEAP** Project

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Outline

- The ADVANCE PROGRAM
- Broad Perspectives
 - National Issues
 - Demographic Inertia
 - Gender Schemas
- Leadership education for advancement and promotion (LEAP)
 - Institutional Change
 - What Are We Doing
 - What Should Everyone Be Doing

ADVANCE at NSF

- Represents a change in strategy.
 - Used to be a lot of programs which gave grants specifically to women scientists and engineers.
 - Not seen as “prestigious”, not felt to be as competitive as a standard NSF grant, not a big influence on tenure/promotion case.
 - Now – focus on a few, large (multi-million) grants to a few institutions with broad goals.
 - Get attention at highest levels of institution.
 - Go for long term impact

Long Term Goal

- Increase the representation of women on science, math and engineering faculties at all levels
- Increase the number of women in leadership positions in science and engineering (SMET)



Need to attract under-represented groups

- Not just because it's the fair thing to do but because it's a necessary thing to do
- Diversity
 - Increases the likelihood of valuable innovations by broadening perspectives and approaches
 - Teams do not work well if everyone on them is alike
 - Maximizes chances of attracting best students to future graduate work and future careers by increasing candidate pool
 - Maximizes probability of economic strength in future

Historical Problem?

- It certainly takes time for a change in a population demographic to propagate through and be reflected in a faculty demographic
 - Assuming a uniform rate of turn over and hiring that reflects the demographic, it will take approximately 35 years
 - An instantaneous change from 20% to 50% in applicant pool has about a 4.2% change over 5 years in make-up of a department if recruitment is at a steady rate

But

- 37% of computer science bachelors in 1987 went to women, 28% in 1999
- % Of full time tenured women on faculties changed only 5% from 1920 to 1995
- Gap between % of women PhD's and % of women on faculties doubled between 1981 and 1993
- Representation of women decreases at each stage of career level, gains in undergraduate representation in physics not matched at graduate level

Gender Schema – how level is playing field?

- Valian (“Why So Slow?”) argues that there exist a set of implicit hypotheses about the differences between the sexes which shape the conceptions of men and women – **gender schema**
 - Wants to avoid phrase “gender stereotypes” since not necessarily bad
 - **Men and women hold the same gender schema**

Gender Schema

- These differences, which many be very small, lead to the **accumulation of advantage or disadvantage**.
 - Despite large variation within a class of, for example, mathematical ability or leadership ability, individuals tend to be judged based on perceptions of average tendencies.
 - Women tend to accumulate disadvantage throughout their careers.

Small Biases Can Have Big Effects

- Consider a hypothetical corporation with 8 levels of hierarchy.
 - Start with equal numbers of women and men at all levels.
 - Assume a 1% bias in promotion rates in favor of men.
 - Top level of hierarchy develops to be 65% male (Martell, lane, & Emrich 1996).

Hard to Avoid

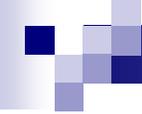
- College students were given a sample of photographs of men and women and asked to guess their heights in feet and inches.
 - Pictures always contained a reference item (eg a desk or chair) to help in estimate.
 - Sample set up (unknown to students) to match every man in sample with a woman of same height.
 - Male and female students estimated the average height of the sample of women to be less than that of the sample of men.
 - (Bremat, Manis and Nelson, 1991)

The Gender Bind

- Women can do everything “right” and still not advance unless
 - Understanding exists of how similar behaviors can be differently perceived
 - They understand the “rules”
- Equality of treatment is not the same as equality of effect

Exceptions Prove the Rule?

- Existence of women who are successful is a necessary but not sufficient argument that all women can be successful.
- Invalidation of a general rule requires proof that it typically does not hold rather than that it fails occasionally.



“POWER

is efficacy in shaping the goals
and policies of an organization or
group.....”

R.M.Kanter

Model of Institutional Change

- Change occurs at many levels
 - University, College, Department, Individual
- Change requires multiple levers
 - Leadership
 - Rewards and Structure
 - Policies/Procedures
 - Professional Support
 - Culture and Symbols

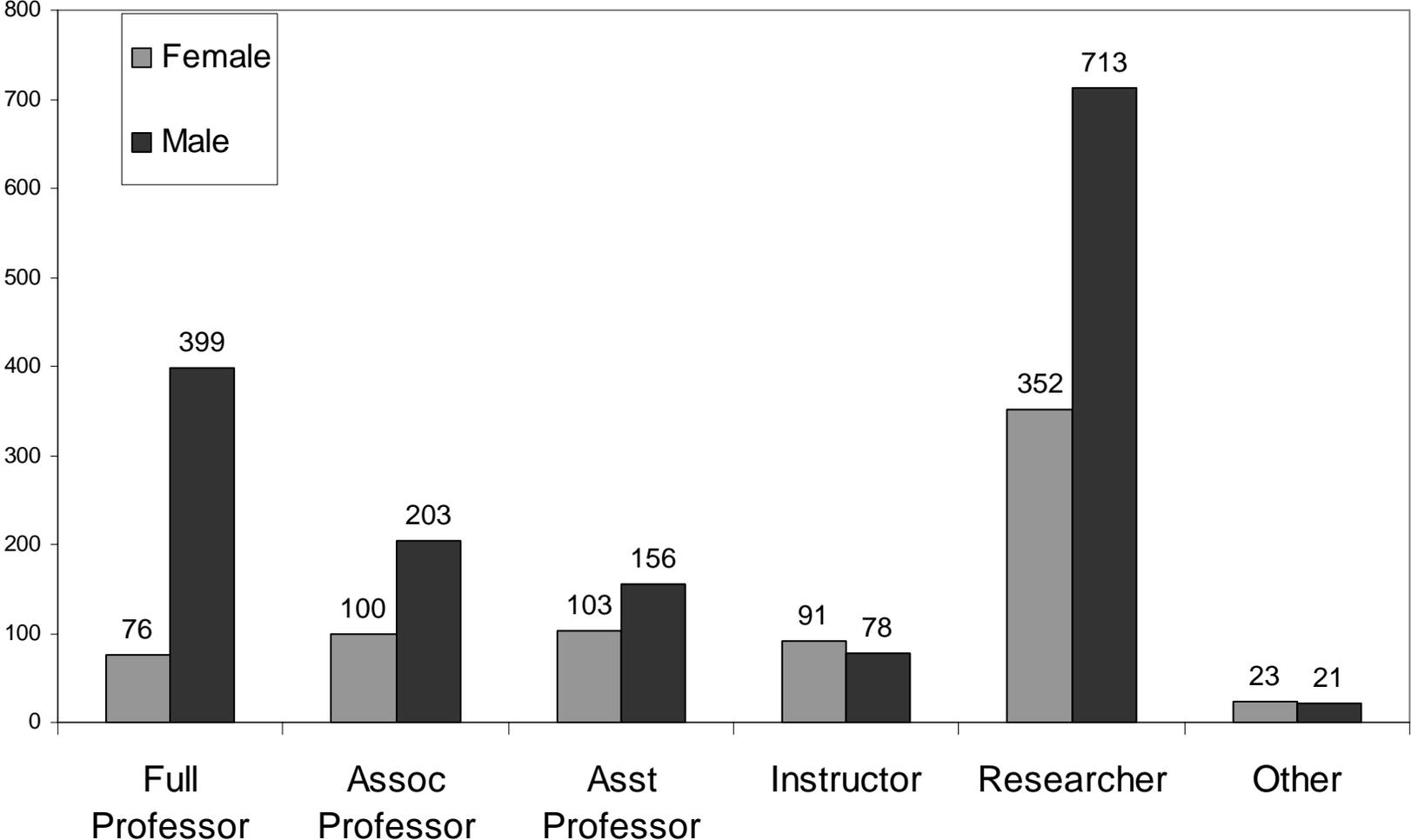
Tempered Radicalism

- All or Nothing often Nothing
- Important to recognize value of incremental change and compromise
 - Not over everything – but choose battles
 - Need to understand culture to change it – doesn't mean have to “sell out”
- “Tempered Radicals” want to succeed in their organizations but live by their values- individuals cause change (Debra Meyerson)

LEAP Premises

- Not a question of “fixing” women faculty!
 - Everyone needs to learn to work with a variety of styles
 - Everyone has a responsibility to address diversity issues
 - Many male faculty members in the sciences and engineering are very concerned about the lack of representation of women (and minorities) and want to adopt better practices
- You don’t transform an institution by concentrating only on a small subset
- Given good will, relatively small changes in behaviors can produce a “tipping point” effect and lead to dramatic change

Number of Males & Females by Job Category



Ranks

- Majority of tenured faculty (78%) and tenure-track faculty (61%) are male
- Most men are tenured (68%) but most women are not (41%)
- Percent of tenured/tenure-track females increases as the discipline gets “softer”

Engineering	12%
Physical Sciences	16%
Social Sciences	34%
Arts and Humanities	40%

LEAP at CU

■ Leadership

- Workshops for junior and senior faculty
- Opportunities to “try out” leadership roles

■ Professional Support

- Coaching
- Networking

■ Policies/Procedures

- As we better understand problems.....

LEADERSHIP – for all

- Programs open to all faculty (no gender or field differentiation)
 - Want to build community and sense of “belonging”, improve retention and satisfaction with career
 - Faculty learn valuable lessons from faculty in other fields
- Aim to improve understanding of differences in styles and approaches and increase individuals ability to “flex” as appropriate.
 - No “one style fits all”
 - People
 - Situations

LEADERSHIP – for all

■ Believe

- “Rising tide raises all ships”
- Faculty members need to be able to negotiate.
- Faculty need to be able to handle “difficult conversations”
- Faculty members need help with time management.
 - Need to be able to set clear, achievable goals for themselves with an associated action plan.
 - Have easy access to useful, relevant information.
- Faculty members spend a lot of time in meetings.
 - Ensuring a well run, productive meeting is an art!
 - Chair and participants have responsibilities.
- Collaborative environments foster innovation

Effective Leaders...

- Self Reflect
 - Understand their strengths and weaknesses and those of others
- Communicate
- Understand all sides of question
- Make policies clear and fair

- The goal of LEAP workshops is ***to educate people about leadership and to develop their skills***

SUPPORT

- Faculty often feel isolated
 - Do not know many people in other departments
 - Do not know who to go to for what
- LEAP is developing a network of trained coaches – plan is to supplement departmental based efforts not replace
- Increases in extent of individuals networks will measure effectiveness of workshops and coaching program and lead to more change....

Value of Interventions

- Boice's research looked at effects of getting incoming faculty to try ten behaviors shown by a study of "high achievers" mostly aimed at breaking through procrastination and avoidance (followed by "bingeing")
 - Small sample (16 in test group) but did compare to controls
 - Focused on writing, publications
 - 75% of test group 19% of control sample completed a manuscript in 1st year
 - Got better teaching ratings (2.4 v 2.0, 4.0 max)

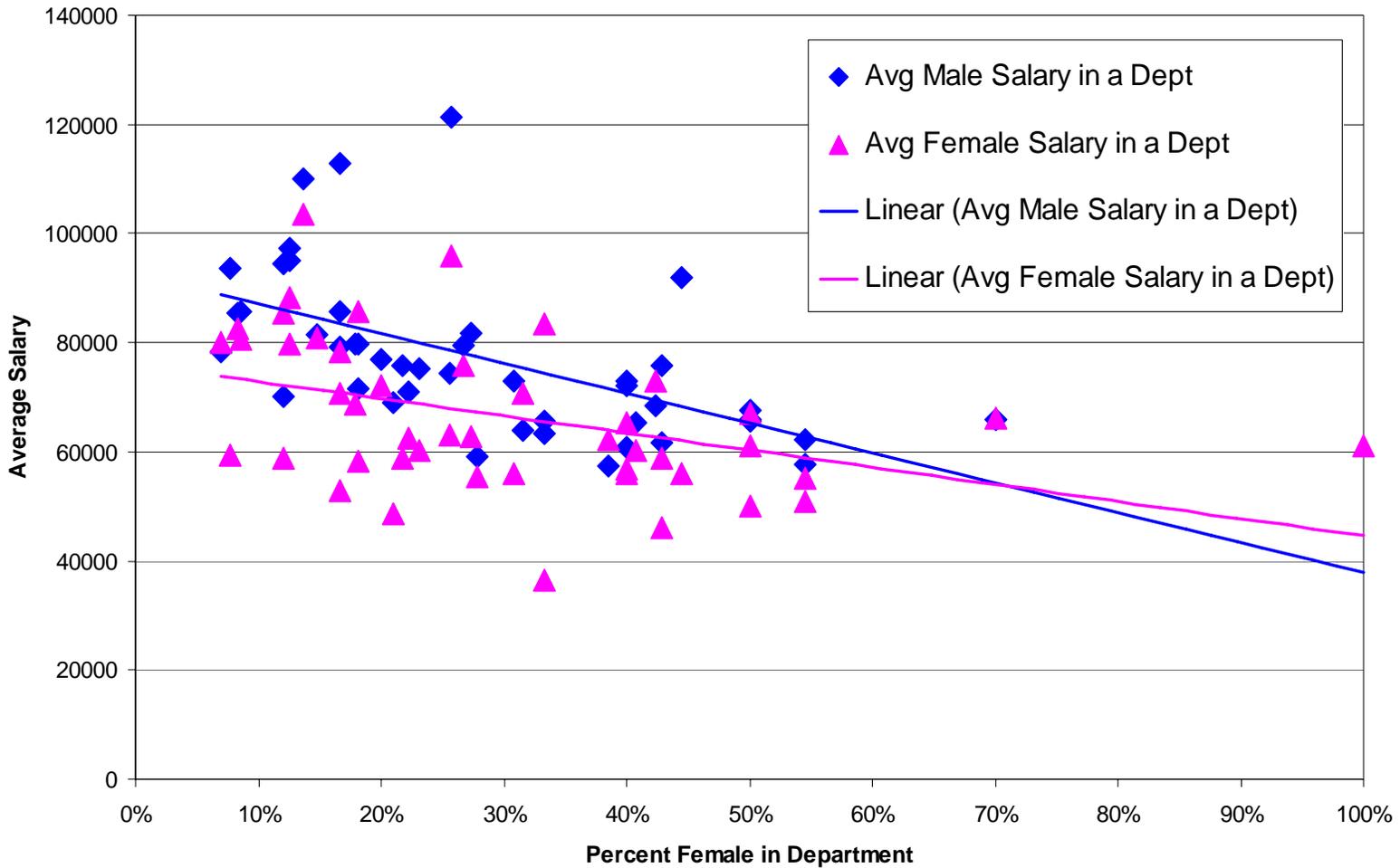
Networking Works

- Everyone can and should be networking
- Organizations should support networking
- Networks need to be broad
- Networks supplement coaching/mentoring
- Networks support
- Social resources are social capital

How do we tell if succeeding?

- Five years is a relatively short time scale to see significant societal change (though subtle changes can have a major impact)
 - What policy changes will we be able to point to?
 - Professional behavior standards....
 - Looking at a variety of statistical benchmarks such as salary levels for male and female faculty members
 - Not as straightforward as might think

Average Salaries in a Department by Gender and Percent Female in Department



What do I see as success?

- Everyone owning the problem
- Willingness to voice issues
 - Networking
- Willingness to accept responsibility for fixing problems
- Ability to fix the problems
 - Negotiation skill set
 - Ability to compromise
- Development of leadership skills