Advancing Women in Science
STRIDE in Context

NSF
ADVANCE
at the University of Michigan
General Features of UM Approach

Data-based in several senses

- Base activities on findings from climate survey
- Increase awareness through climate findings
- Discuss evidence-based approaches to change
- Use data to monitor progress and to identify problems
General Features of UM Approach

Interventions also based on Theory in the background

- Draw on systems theory
  - Multiple points of entry
- Fostering collective identity for women scientists
- Conceptual tools: Critical Mass, Evaluation Bias and Accumulation of Disadvantage
General Features of UM Approach

Aimed at institutionalization

- Identify problematic practices (hiring, evaluation, service, promotion, faculty support, climate, etc.)
- Identify beneficial practices that improve key outcomes
- Institutionalize those practices wherever possible through
  - New structures (if necessary)
  - New practices
  - Changes in policies
Starting with Data: Design of Climate Study

Instructional track female scientists compared with:

- Male scientists (random subsample)
- Female social scientists (all those in colleges with scientists)
Key Differences in Climate Survey Findings

- **Household structure**
  - More likely not partnered
  - More likely to have partner employed full-time

- **Contract Renegotiation (including counter-offers)**
  - Men have more items in package

- **Service**
  - Serve on more committees
  - Not more likely to chair them

- **Mentoring**
  - Less mentoring of assistant professors
Institutional Climate

Overall:

- Satisfaction with position at UM (women scientists lowest)
- Gender discrimination in past 5 years (40% of women scientists report at least one area)
- Unwanted sexual attention in past 5 years (20% of women scientists report)

Departmental:

- Nine scales (women scientists most negative, women social scientists often least)
Implications of the Findings

- Improve climate for women scientists by
  - improving experience of equity in key areas
  - improving work-household interface
  - lessening service burdens and increasing opportunities for leadership
  - improving mentoring
  - improving departmental “microclimates”

- Increase critical mass – focus on recruitment
Addressing Climate at Multiple Points of Entry

- **Institution-wide—leadership-driven**
  - Publicizing data/“Consciousness-raising”
  - Institutionalizing policy change
  - Monitoring data

- **Individuals—resource-driven**
  - Creating collective identity for women scientists and engineers
  - Leveling the playing field
  - Leadership opportunities for women

- **Departmental “microclimates”—hardest to make happen**
  - Provide analysis of history and current situation
  - Feminist theory in the background
  - Incentives for self-analysis and self-motivated change
Consideration of Policy Changes—Leadership-driven

- Committee on Gender in Science and Engineering convened by President and Provost
- Subcommittees chaired by 3 deans made recommendations on
  - Faculty Tracks and Work/Family Integration
  - Recruitment, Retention, and Leadership
  - Evaluation and Promotion of Faculty
GSE Sub-Committee Composition

- 21 senior faculty in science and engineering
  - 12 men, 9 women
  - 6 colleges (LSA, Medicine, Engineering, SPH, Pharmacy and Dentistry)
  - 13 departments within the 4 largest colleges
Choices about Management of Process

- Permitted issues to arise in multiple committees (as some did: tenure clock, mentoring, partner policy, and child care)
- Current followup implementation committees and activities led by deans and provost
Institutionalize Monitoring of Data at Multiple Levels

Annual report from ADVANCE
- Released to women scientists first

Provost committed to salary reviews
- Creating committee to examine models and ensure cross-college awareness

Colleges doing this
- New/enhanced positions re institutional data
- New practices and policies
  - LSA review of shortlist review outcomes
Addressing Climate at Multiple Points of Entry: Individuals

- Leveling the Playing Field for Individuals—Provide direct resources
  - Network of Women Scientists and Engineers
  - Elizabeth C. Crosby Fund: Funds research-related needs of individual faculty—leveling playing field
  - Leadership opportunities for women scientists
  - Women Talking Science and Engineering
Interventions to Address Climate

- Department “Microclimates”
  - Departmental Transformation Grants: Fund self-change efforts designed by departments based on self-analysis—focus on climate
  - CRLT Players—focus on recruitment, mentoring, evaluation
  - Science and Technology Recruiting to Improve Diversity and Excellence (STRIDE)
Influencing Recruitment—a Departmental Practice

- Creation of STRIDE (committee for Science and Technology Recruiting to Increase Diversity and Excellence)
  - Nine science and engineering full professors
  - Preparation of handbook
  - Created FASTER (Friends and Allies of Science and Technology Equity and Recruiting)
  - Two alternate presentations
  - Workshops for search committee chairs
- Encourage better, equitable recruiting strategies
Seated at table:
Pamela Raymond,
Abigail Stewart,
Samuel Mukasa,
Carol Fierke,
Anthony England,
Martha Pollack,
John Vandermeer,
Melvin Hochster

Gary Huffnagle and
Wayne Jones
Recruitment strategies: Feminist Theory in the Background

STRIDE offers:

Conceptual tools
- Gender schemas
- Evaluation bias
- Critical mass
- Accumulation of disadvantage

Empirical evidence
- Evaluations of cvs
- Evaluation of fellowship and grant proposals
- Impact on salary of different background factors
- Influence of small biases on institutional outcomes
- Leadership and the head of the table

Explanatory Model
Lowered career success rate

Accumulation of disadvantage

Performance is underestimated

Evaluation bias

Gender schemas

Lack of critical mass
Is STRIDE Affecting Recruitment? Progress to Date

Science and Engineering Hires in COE, LSA, MED AY2001-AY2004

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