A Warmer Climate for Women in Engineering

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Outline of Talk

- Background information about URI
- < 2000: Chilly Climate for women in Engg
- > 2000: The Thaw
  - Increased Administrative support for women in STEM resulting from Faculty Union Grievance
  - Award NSF ADVANCE Grant (2003-08)

Revolving Door – Female Engineering Faculty at URI

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Background on U. of Rhode Island

- Medium sized University
  - 600 faculty
  - 12,000 undergrads; (3,000 grads)
  - Public Research, Land/Sea/Urban Grant
- Engineering is 1 of 6 URI “Colleges”
  - 8 engineering BS programs (6 MS, PhD)
  - 60 - 70 faculty
  - 850 – 950 undergraduates
- Heavily Unionized University & State
  - active AAUP (Amer. Assoc. of University Professors)
- Small State – all politics are local
What changed at URI?

- 1998: URI AAUP filed sexual harassment grievance against Dean of Engineering
  - Initiated by Sociology Professor after he witnessed the exit interview of female engineering professor
  - 18 month arduous, acrimonious process
- Increased public support for 3 women Engg faculty helped bring grievance to resolution
  - 20 faculty met with President and Provost
  - 130 URI faculty signed Petition supporting female Engg faculty
  - Newspaper Publicity (small state)
  - Better understanding of what constitutes Sexual Harassment
    • Coercive vs. hostile environment

URI & AAUP Resolution in 2000

- URI President acknowledged
  - A hostile environment existed for women in engineering
  - Professional careers of Women faculty were adversely affected.
  - Dean of Engineering had allowed hostile climate to persist unchallenged; he should apologize to women.
- URI Administration agreed to several corrective, pro-active recruitment and retention measures
- AAUP & female Engg faculty dropped the grievance

Gender Differences - Female Engineering faculty received

<table>
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<th>LESS</th>
<th>MORE</th>
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| Lab/office space
  - Size, location, quality
  - time to renovate/repair
| Committee work
  - Student advising or outreach activities |
| Professional respect
  - Men → “Dr. Smith”
  - Women → “Suzie” | Unwelcome comments / reprimands
  - appearance or apparel |
| Informal access to chairs and networks of support & information
  - e.g. advance notice of grant opportunities | Unwanted pornography in classroom/labs |
| etc. | etc. |

Pro-active steps taken since 2000

- Strong, public advocacy from President and Provost Offices in support of women in STEM fields
- New Engineering Administration
- Revived Engineering Diversity Committee
  - Increased efforts and financial support
  - Increased representation from outside of Engg.
- Support for an NSF ADVANCE proposal
2003 URI awarded NSF ADVANCE Grant

- 5 years, $3.5 M
  - Recruitment: Faculty Fellows
  - Faculty Development
  - Work-Life
  - Climate
  - Evaluation/Assessment

ADVANCE Recruitment – Faculty Fellows program (Win-Win)

- ADVANCE benefits from increase in # female faculty in STEM fields
- URI saves money - Grant money provides part of salary and start-up packages for new faculty
- Administration & department maintain control over Fellow hiring decisions.
  - Provost and Deans determined which STEM department would receive Fellow; also, salary & start-up
  - Department selected research area, search committee, and candidate to hire
- Fellows receive extensive incentives & support network

STEM Departments hiring Fellow

- Competed to “pre-book” faculty line
  - First 2 Fellows hired in Engineering
  - Large, Outstanding applicant pool convinced skeptics in several depts.
- Participated in ADVANCE workshops
  - Department Strategic Planning workshop
  - Climate Workshop
  - Best Practices for Recruitment and Searches
  - Mentoring
- Included ADVANCE representative on search committee
- Scheduled each Fellow candidate to have lunch meeting with ADVANCE during on-campus interview

Faculty Fellows program very successful

*Advance: 2 Engineering + 1 Physics + 1 GSO + 1 CELS
Colleges: + 1 Psych + 3 GSO + 1 CELS
**Stopped Revolving Door – Female Engineering Faculty at URI**

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**10 Faculty Fellows: Incentives**

- Prestige of affiliation with NSF
  - Reputation ADVANCE program
- Minimal teaching loads and no service for first 1-2 years to get head start on research
- Assurances that Fellow position
  - will transition to tenure-track when faculty line opens
  - counts towards tenure clock, at Fellow’s discretion
- Opportunity to talk confidentially with women scientists during interview about climate, maternity leave policy, dual career issues, etc. (*bias avoidance*) & negotiating start-up packages.
- ADVANCE Faculty Development Workshops and support network

**ADVANCE Faculty Development – Retention Activities**

- **Workshops**
  - Mentoring, Grant Development, How to Negotiate, Writing …
- **Monthly Topical Luncheons**
  - Thinking about tenure from the start
  - Gender-sensitive teaching
  - Dual Career Issues
  - Work-work and home-work
  - Visiting Speakers (Valian – “Why so Slow”, Drago “Bias Avoidance”)
  - Didn’t I just say that? How to be heard
  - …

**ADVANCE Faculty Development – Retention Activities**

- **$20-40k/yr Incentive Grants**
  - to promote women in STEM fields
  - 24 grants (given to men & women)
- **ADVANCE Office**
  - resource for information and confidential advice
- **Social Activities after work to reduce sense of isolation**
  - book club, pot luck dinners, subsidized tickets to plays, concerts, …
Assessment and Evaluation

- 2003 Campus wide climate survey conducted (39% response rate); to be repeated in 2007.
- Most Important factors for Career Satisfaction
  - Work Respect, Influence at Work, Positive Work Climate, Resources, Work-Family Balance
- Men Report More Positive Work Environment:
  - More Career Satisfaction, More Influence Over Careers, Less Discrimination
- Women Report More Interpersonal-Work Challenges:
  - Less Interpersonal Support & Respect, Less Likely to Decide to Have Children, More Consideration of Partner’s Job Opportunities, More Belief in Combining Career & Parenting

Climate

Departmental Climate Workshops offered by ADVANCE

- Help STEM departments identify strengths, set strategic goals, and improve departmental dynamics
  - Set positive, pro-active goals
  - Improve Inclusiveness and Openness
    - benefit all
    - “Rising Tide lifts all boats”

Work-Life

Parental Leave Policy for birth or adoption developed & passed providing 6 weeks paid leave and optional 1 year delay of tenure clock

- Campus Involvement & Support
- 11 participants (including several men)
- Focus on inclusiveness, can benefit men & women

Dual Career Guidelines Being Developed
- Administrative Encouragement
- Still have Union concerns and procedures to overcome

Work Climate

Workshops and Best Practices integrated with theoretical models of organizational change

- Appreciative Inquiry:
  - emphasis on how all faculty can benefit from analysis of what contributes to an excellent work environment
- Trans Theoretical Model:
  - system of matching change strategies to defined levels of readiness for change
- Institutional, Interactional, Individual: (~ 3 legged table)
  - Administrative policy, Top-Down
  - department practices and culture
  - Grass roots, Bottom-Up
Conclusions (www.uri.edu/advance)

• NSF ADVANCE has improved recruitment, retention and climate for female faculty in STEM fields at URI

• Many Benefits of having a Multi-disciplinary team
  – Engineering, Physical Sciences, Social Sciences, Administrators
  – Social Theory on change very helpful

• Work being done to sustain change beyond grant
  – Institutionalized within existing campus committees/groups

• Many activities can be done at low cost
  – Ask Senior Faculty to lead workshops or Topical lunches
  – Seek ways to publicize existing Work-Life Balance initiatives
    • Knowledge is power for new faculty in negotiations with chair
  – Organize low cost social events to reduce sense of isolation