# Faculty Leadership Development Programs at Virginia Tech 

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## Overview

- Institutional context
- Status of women faculty
- Leadership development programs
- Findings
- Implications


## Context: Where is Virginia Tech?



## Context: Institutional History

## Then:

- Founded 1872
- Land grant college
- Polytechnic with strengths in agriculture and engineering

- Predominantly male, racially segregated, compulsory military until early 1960s
- First women graduated 1925


## Context: Virginia Tech today



- Public research intensive university; over 100 doctoral programs, primarily in engineering and sciences
- 30,000 students (44\% female)
- Generated \$373.3 million for research programs in fiscal year 2008, 46th in the nation
- As of fall of 2009, 1,383 tenured or tenure track faculty members, $26 \%$ female

Women as a percentage of S\&E doctoral degrees, full-time full professors, and full-time tenure-track faculty: 2006


Women, Minorities, and Persons With Disabilities in Science and Engineering
Updated December 2008


Women, Minorities, and Persons With Disabilities in Science and Engineering
Updated: December 2008

## Women Faculty at Virginia Tech by College, Fall 2009

$\square$ Assistant Professor $\square$ Associate Professor $\square$ Professor


## Women as \% of Total Full-Time Tenured \& Tenure-Track Faculty



## New Full-Time, Tenure-Track Women Faculty



| $\%$ vomen | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\operatorname{COE}$ | $27 \%$ | $12 \%$ | $0 \%$ | $9 \%$ | $32 \%$ | $32 \%$ | $24 \%$ | $16 \%$ | $17 \%$ | $23 \%$ | $11 \%$ |
| $\operatorname{COS}$ | $10 \%$ | $31 \%$ | $40 \%$ | $0 \%$ | $30 \%$ | $33 \%$ | $54 \%$ | $29 \%$ | $22 \%$ | $33 \%$ | $40 \%$ |

## Women Leaders at VT

- One of eight academic deans
- Ten of 26 associate deans in academic colleges
- Eleven of 61 department heads
- Three of 14 executive administrators
- Three of 13 university-level research center directors



## Women Full Professors at Virginia Tech, 1999-2009



# Challenges for Women in Academic Leadership 

- Leaky Pipeline
- (Lack of) Mentoring
- University Climate


## Where do the women go?

Leaks in the Academic Pipeline for Women*

http://ucfamilyedge.berkeley.edu/leaks.html

## Mentoring



Erratically applied mentoring / pressure ag ainst transcending traditional gender patterns

## University Climate

- Prohibitive organizational paradigms
- "Old boy networks"
- University policies not enforced
- Exclusion from decision making


## Overview: AdvanceVT

- 5-year \$3.5M NSF IT grant received in 2003
- Key leaders but also many faculty and collaborators across university involved
- Comprehensive approach:
- Increasing the number of women in the pipeline
- Recruitment and retention of women
- Leadership development
- Work-life policies
- Departmental climate
- Research and assessment


## Leadership Development Programs

- Research seed grants (22 awarded)
- Distinguished lectures (1-2/year)
- Faculty leadership lunches (2-3/semester)
- Leadership fellowships (6 awarded)
- Leadership development coaching program
(18 participants)



## Seminars and Workshops

- Workshops to build specific skills, including communication, resolving conflict, negotiation, power and influence, and time management
- Leadership lunch seminars provide opportunities to interact with current leaders, e.g. department heads, deans, vice-presidents, provost



## Leadership Fellowships

- Leadership Fellowships awarded to six women faculty members to complete selfdesigned leadership development experiences.



## Leadership Coaching

- Three cohorts of women selected from across the university for a year of individualized coaching and skill development



## Evaluation Outcomes

- Leadership Development Event Evaluations
- Leadership Development Program Participant Interviews
- Faculty Work-Life Surveys


## Event Evaluations

- Importance of networking
- Educating faculty on various aspects of academic leadership
- Changing faculty perception of leadership and leaders

> "These [events] have been an effective offering and goood networking. The more faculty can understand the thinking of university leaders, the more engaged they can be as well as supportive."

- Yet women faculty at the institution continue to be ambivalent about entering into leadership positions


## Leadership Development Program Interviews

- Participants indicated that their leadership skills and confidence to pursue leadership opportunities increased, but only a few of the participants expressed a desire in the near future to pursue leadership positions.
- Participants felt that the program helped them to attain greater success in their current positions and to participate more fully in department leadership opportunities.

$$
\begin{aligned}
& \text { "I accepted a department head's position and without } \\
& \text { those two experiences [LDP and a national leadership } \\
& \text { program] I would have never considered it.." }
\end{aligned}
$$

## Leadership Development Program Interviews

- Consistent with data from the leadership event evaluations, most participants articulated the belief that administrative roles required much more time and effort than originally expected. Furthermore, such positions take away from activities traditionally associated with being a faculty member, such as research and teaching.


## Faculty Work-Life Surveys

Percentage of tenured and tenure track men and women who strongly or somewhat agree:

(1)VIrginiaTech

## Findings

- Women continue to exhibit conflicting attitudes towards leadership.
- Concern over amount of work involved and the corresponding time commitment required in taking on leadership positions as a faculty member.
- Women with young families and/or at the associate professor level are particularly hesitant to take on formal leadership roles given the importance of research output for achieving promotion to professor.


## Implications

- Institutions must not only provide resources to help individuals prepare for leadership roles, they must also examine their expectations of leaders and structure of leadership positions.
- Policies that facilitate work-life balance for faculty members may also play a role in filling the pipeline of qualified women for leadership positions.
- Future research should delve more fully into the success of the ADVANCE grants in transforming universities, and the subsequent way these efforts impact how leadership is defined at those institutions.


## Acknowledgements

> AdvanceVT is supported by Virginia Tech and the National Science Foundation (Grant \#HRD 0244916). Any opinions, findings, conclusions or recommendations expressed are those of the author and do not necessarily reflect the views of the National Science Foundation or Virginia Tech.

# For more information: 

www.advance.vt.edu

