



International Journal of  
**Gender, Science and Technology**

<http://genderandset.open.ac.uk>

## **WomenLEAD: Leadership Development for Female Faculty in Business and Engineering**

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### **ABSTRACT**

In the fall of 2009, three women faculty members in the Bagley College of Engineering and the College of Business at Mississippi State University initiated a leadership development program for female faculty members in those colleges. This paper provides a summary of the first two years of that program. In this paper we describe the motivation for establishing this program, the environment in which the program was conducted, and the discussion topics for the sessions that were held. We also provide feedback from the participants who responded to a survey about the program. We conclude with some general observations about the program and plans for its continuation.

### **KEYWORDS**

Leadership development; mentoring; women faculty

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## **WomenLEAD: Leadership Development for Female Faculty in Business and Engineering**

### **INTRODUCTION**

In 2009, three female faculty members at Mississippi State University (MSU) – Julia Hodges, Allison Pearson, and Donna Reese – initiated a leadership development program, called *WomenLEAD: Leadership, Exploration, and Development*, for female faculty in the Bagley College of Engineering (BCoE) and the College of Business (CoB) to address special challenges faced by women in attaining leadership positions on campuses. There is a faculty leadership program at MSU conducted through the Office of Research and Economic Development, but this is a general-purpose program that is not defined to address the challenges faced by women faculty members. The primary purpose of this paper is to share some of the activities and presentations that were a part of *WomenLEAD* during the first two years of this program, to encourage other institutions to conduct similar opportunities for women faculty, and to share ideas with people at other institutions who have similar efforts underway. This paper also summarizes impressions of the impact that the program has had and some plans for future activities.

### **MOTIVATION**

A major goal in *WomenLEAD* is to encourage more women faculty to assume positions of leadership on campus, including administrative appointments and service on key decision-making bodies. Gender inequality is a long-recognized problem in academia. For example, a recent study by Goldberger and Crowe (2010) found evidence of gender inequality “in terms of promotion, tenure, and salary” (p.337) in the agricultural sciences at land-grant universities. Their study included consideration of the impact of four different factors that could account for the discrepancies that they found: human capital, professional networking, means of scientific production, and research productivity. They found significant gender inequality in spite of the fact that they found few gender differences in these four factors, a clear indication of an existing bias faced by women faculty in the agricultural fields.

Similar results have been found in other disciplines. For example, van Anders (2004) conducted a study to determine if there are systemic barriers to parenting that discourage women from academic careers. His findings indicated that, while men are as interested in having children as women are, women tended not to pursue academic careers because of perceptions that there are barriers to success that are related to parenthood. It has long been the case that fewer women than men are in tenured or tenure-track positions, and this has continued in spite of the increasing number of women pursuing college degrees. Women outnumber men at the lecturer/instructor position, but have enjoyed little opportunity for advancement. While there could be a number of reasons for this, much of the evidence found in the van Anders study indicates that women are not choosing academic careers because of such factors as parental leave policies, availability of childcare, and geographic mobility. Universities that wish to increase the number of women faculty in tenured or tenure-track positions must address issues such as on-

site childcare and fully funded parental leaves so that the perception is created that “academia is as hospitable to mothers as other workplaces are” (p.519).

According to Aguirre (2000), colleges and universities have attempted to recruit more women and minority faculty members without recognizing their special challenges when trying to fit into an institution dominated by white men. Aguirre states that women and minority faculty, in addition to being expected to establish research programs, are heavily burdened with teaching and service responsibilities and diversity-expanding activities, roles not rewarded in the promotion and tenure process or in the faculty reward system.

In their study of the perceptions of tenured female science and engineering professors, Tyson and Borman (2010) found that women place more emphasis on a sense of community than men do. The feeling of isolation that many women faculty have discourages them from continuing in their academic careers.

*WomenLEAD* is intended to provide advice and support for women faculty from every faculty rank. The program addresses a wide variety of issues and situations, focusing on special challenges encountered by women. One goal is to establish a support network for women faculty in the two colleges. A second goal is to provide mentoring and encourage new mentoring relationships among participants. A third goal of the program is to encourage women faculty to set clear professional goals for themselves, determine what resources they need, and learn positive ways in which to ask for what they need.

## ENVIRONMENT

MSU is a comprehensive, land-grant university with about 20,000 (mostly on-campus) students. When *WomenLEAD* was first established, there were forty women in the BCoE and CoB with the title of instructor, assistant professor, associate professor, or professor. These numbers do not include positions such as research professor, but are limited to those whose primary responsibility lies within an academic department. These numbers do include women with administrative appointments at the associate dean level in both colleges. The *WomenLEAD* program leaders are not included in the counts. The breakdown in rank and college is shown in Table 1:

Table 1. Number of female faculty members in BCoE and CoB

<b>Title</b>	<b>BCoE</b>	<b>CoB</b>
Instructor	5 (38.5%)	8 (53.3%)
Assistant professor	6 (22.2%)	2 (15.4%)
Associate professor	5 (14.7%)	6 (27.3%)
Professor	4 (10.3%)	6 (28.6%)
<b>TOTAL</b>	<b>20 (17.7%)</b>	<b>21 (31.0%)</b>

The numbers in parentheses indicate the percentage of the total number of faculty members in each given category who are female. The largest representation of women is at the instructor level, with that rank in the CoB being the only one with a female majority.

The deans in these two colleges are women and have been very supportive of the efforts of the *WomenLEAD* program. The presence of women in these two leadership positions is, unfortunately, not representative of the university as a whole. At the upper administration level, there are no women. The president, executive vice president/provost, and all vice presidents are men. One of the authors has just been appointed Associate Vice President for Administrative Services, making her the only woman in an associate vice president position.

**WomenLEAD: LEADERSHIP, EXPLORATION, AND DEVELOPMENT**

*WomenLEAD* is intended to address a number of different issues and challenges faced by all university faculty, concentrating on those aspects that are unique to or at least more prevalent among women. The breakdown in the total number of participants in the *WomenLEAD* program is shown in Table 2. The program consisted of 8 sessions and not all participants attended every session.

Table 2. Participants in WomenLEAD Program

Title	BCoE	CoB
Instructor	1	1
Assistant professor	5	2
Associate professor	2	4
Professor	5	2

Each session incorporated the sharing of information by the *WomenLEAD* program leaders with open, frank discussion among participants. The program leaders planned each session so that the participants would have at least one 'take away', i.e., an idea that she could apply to her own career. The program leaders used case-based scenarios to spark discussion among the participants and reinforce the session topic.

**SUMMARY OF SESSIONS**

The deans from the two colleges made a brief appearance at the first session to state their support of *WomenLEAD*. Some time was spent in initial sessions talking about how leadership may be defined, different leadership and communication styles, and characteristics typically found in good leaders. Different kinds of leadership roles, not just those in administrative appointments, were included in the discussions. Participants used the Implicit Association Test ([Project Implicit](#)) to explore their gender biases and gender-based behaviors and to increase their awareness of the effect of implicit biases on expectations of how people should function at home and work. Participants also talked about their own gender-based

behavior and its effect on their careers: volunteering for more service assignments, coordinating social events, mentoring students and colleagues, and carrying more family responsibilities. A study by Taylor (2009) was the foundation for a discussion of how women under-rate themselves because they do not expect their efforts to be recognized by others, thus creating their own glass ceilings.

There were sessions on roadblocks and challenges in academic careers that typically affect women to a greater extent than men: dual careers, parental leave policies, and balancing family life with a career. Published statistics ([The UC Faculty Family Friendly Edge](#); Shiebinger, Henderson, and Gilmore, 2008) encouraged participants to think about why women are less likely than men to be in tenured or tenure-track positions and why the same is true of (a) women with babies when compared to women without babies and (b) married women when compared to single women.

Examples of obstacles faced by women in the promotion and tenure process include a bias against caregivers (typically women), inadequate family leave policies in many universities, and the fear of being viewed as getting special treatment (Aguirre, 2000). Participants considered how women faculty members can empower themselves to have greater control over their progress in the promotion and tenure process. They also considered the importance of setting long-term and short-term goals and strategies for reaching goals.

Two of the sessions addressed the art of negotiation. Many women simply never ask for what they need in order to be successful (Babcock and Laschever, 2007). There are differences in the negotiation styles of men and women (Swackhamer, 1992). The *WomenLEAD* leaders used role playing in different negotiation situations to allow the participants to discover mistakes that were made and changes that could be made to ensure successful negotiations.

A session on communicating with power was led by Megan Foley, a Communication Department faculty member. She provided tips on how to transcend gender stereotypes and communicate effectively across gender lines. She shared ways in which we can project powerful professional impressions through body language, posture, eye contact, and positive, strong language without undermining ourselves by appearing overly aggressive.

At the last session, Jerry Gilbert, MSU's Provost and Executive Vice President, met with the group for an informal discussion of various issues including family leave, stopping the tenure clock, support for child care, strategies for increasing the number of faculty members from under-represented groups, promotion and tenure expectations, and salary inequities. Gilbert indicated support for making the university more pro-active in increasing opportunities for under-represented groups, and he took under advisement a number of suggestions that were made. He indicated interest in meeting with the group again for a follow-up discussion.

**PARTICIPANT SURVEY**

Participants were asked to use this scale to respond to statements about whether the program increased their awareness/understanding of relevant issues or provided them with new information:

**1** – strongly disagree   **2** – disagree   **3** – neutral   **4** – agree   **5** – strongly agree

They were also invited to describe how they had incorporated something from the program into their professional lives. Thirteen participants completed the survey. The survey results are summarized in Table 3.

*Table 3. Survey results.*

Statement	1	2	3	4	5	Average
<b>Session one: leadership qualities, gender biases</b>						
ways to be a leader	0	0	0	3	5	4.63
gender biases	0	0	2	3	3	4.13
effect of gender-based behaviors on others' expectations	0	0	2	3	3	4.13
<b>Session two: communication styles, gender-based behaviors</b>						
impact of communication style on career	0	0	0	3	4	4.57
leadership qualities	0	0	2	2	3	4.14
negative effects of gender biases on career	0	0	1	2	4	4.43
<b>Session three: career challenges</b>						
challenges in balancing professional and personal life	0	0	1	2	4	4.43
ideas about addressing challenges	0	0	2	3	2	4.00
understanding of relevant university policies	0	0	1	2	4	4.43
<b>Session four: promotion &amp; tenure, goals, negotiations</b>						
obstacles in promotion & tenure	0	0	2	1	2	4.00
strengthening promotion & tenure packets	0	0	2	1	2	4.00
importance of negotiating	0	0	1	2	2	4.20
<b>Session five: negotiations</b>						
need for preparation before negotiation	0	0	1	1	3	4.40
making negotiations successful	0	0	3	1	1	3.60
awareness of my need to negotiate	0	0	3	1	1	3.60
<b>Session six: communicating with power</b>						
gender-based differences in communication style	0	0	0	3	4	4.57
increased awareness of appearing weak and indecisive	0	0	0	4	3	4.43
tips on communicating with power	0	0	1	2	3	4.33

<b>Statement</b>	1	2	3	4	5	Average
<b>Session seven: moving into administration</b>						
what is involved in being an administrator	0	0	2	3	4	4.33
tips on positioning myself to move into administration	0	0	1	3	2	4.17
qualities of a skilled administrator	0	0	1	2	3	4.33
<b>Session eight: discussion with provost</b>						
understanding of provost's expectations regarding women's challenges in promotion & tenure, family leave, and stopping tenure clock	0	0	2	3	4	4.22
opportunity to discuss issues of concern with provost	0	0	1	3	5	4.44
confidence in provost's commitment to increasing opportunities for under-represented groups	0	0	2	2	5	4.33

**CONCLUSION**

The participants' responses to the programs were quite positive, with all of the survey items being rated at 4.00 or above with the exception of those items that reflect changes in behavior regarding negotiations, an area most likely of all to take the participants out of their comfort zones. The participants were also invited to provide comments at the end of the survey. The participants indicated that the *WomenLEAD* program had increased their professional confidence and given them a network of "TRUSTED, capable, accomplished women," which one described as a refreshing change after twenty years in academia and another said has increased her enjoyment of her job. They also cited an improvement in their communication skills and their awareness of gender differences as a result of their participation in the program. There were comments about their disappointment in not being able to attend all sessions and their hope that the sessions can be repeated.

Based upon the feedback provided, the organizers plan to continue to facilitate networking of the participants among themselves and the formation of mentoring relationships by continued formal program sessions as well as informal gatherings. The success during the first two years of having senior-level participants provide advice and share experience with the newer faculty members will be exploited to even greater advantage as the program continues by having additional senior-level women faculty and administrators on campus to lead the sessions. This exposure to experienced, accomplished women on campus was one of the highlights of the program for the participants as indicated in their comments. The organizers plan to expand the program to female faculty in other colleges on campus.

In their review of faculty mentoring programs, Zellers, Howard, and Barcic (2008) note that mentors and support networks can, under optimal conditions, provide others with a networking/mentoring experience that engenders trust, reciprocates respect, demonstrates commitment to others, provides support, and offers vision. The *WomenLEAD* effort and subsequent survey results indicate initial success in providing this valued support to female faculty in Engineering and Business.

## REFERENCES

Aguirre, Adalberto, Jr. (2000) *Women and Minority Faculty in the Academic Workplace: Recruitment, Retention, and Academic Culture*, ASHE-ERIC Higher Education Report, Vol. 27, No. 6, Jossey-Bass.

Babcock, Linda, and Sara Laschever (2007) *Women Don't Ask*, New York, Bantam Books.

Goldberger, Jessica, and Jessica Crowe (2010) '[Gender Inequality within the U.S. Land-Grant Agricultural Sciences Professoriate](#)', *International Journal of Gender, Science and Technology*, Vol. 2, No. 3.

Schiebinger, Londa, Andrea Davies Henderson, and Shannon K. Gilmore (2008) *Dual-Career Academic Couples: What Universities Need to Know*, Michelle R. Clayman Institute for Gender Research, Stanford University.

Swackhamer, Deborah L. (1992) 'Being a Female Faculty Member: What They Didn't Teach You in School', *Journal of Contemporary Water Research and Education*, Issue 89, Autumn (Issues of Human Diversity in Water Resources), pp. 13-14.

Taylor, S.N. (2009) *It May Not Be What You Think: Gender Differences in Predicting Emotional and Social Competence*, National Academy of Management Conference, Chicago, IL, August.

Tyson, Will, and Kathryn M. Borman (2010) 'We've All Learned a Lot of Ways Not to Solve the Problem': Perceptions of Science and Engineering Pathways Among Tenured Women Faculty', *Journal of Women and Minorities in Science and Engineering*, Vol. 16, Issue 4.

van Anders, Sari M. (2004) 'Why the Academic Pipeline Leaks: Fewer Men than Women Perceive Barriers to Becoming Professors', *Sex Roles*, Vol. 51, Nos. 9/10, November.

Zellers, Darlene F., Valerie M. Howard, and Maureen A. Barcic (2008) 'Faculty Mentoring: Re-envisioning Rather than Reinventing the Wheel', *Review of Educational Research*, Vol. 78, No. 3, pp. 552-588.