
ADVANCE-NEBRASKA NSF THIRD YEAR SITE VISIT REPORT

March 2011

I. THEORY OF CHANGE

Our goal is to increase the recruitment, retention and promotion of women on the faculty in STEM departments through sustainable institutional transformation. Gender scholars (e.g. Risman, 2006) argue convincingly that institutional change requires new policies, practices and procedures in social structures at individual, interactional, and institutional levels. ADVANCE-Nebraska uses this framework when we design programs. Several of our programs involve change at multiple levels simultaneously. Therefore we have organized this overview based upon the primary targeted level of change.

At the time ADVANCE-Nebraska was funded, the economic picture in Nebraska and the nation was brighter. UNL has had budget reductions in each of the past three years. These reductions affected the number of tenure track faculty position openings. In spite of these economic challenges, ADVANCE-Nebraska has made progress and has broad-base buy-in across the campus.

II. PROPOSED PROGRAM INITIATIVES: PROGRESS AND STATUS

1. INSTITUTIONAL LEVEL POLICIES AND PROGRAMS: PROVIDE SUPPORT TO RECRUIT WOMEN TO APPLICANT POOLS TO BETTER REFLECT THE NATIONAL POOLS.

PROGRAM 1.1. DUAL CAREER PROCEDURES AND FUNDS TO FACILITATE HIRING COUPLES WITH WOMEN IN STEM DEPARTMENTS

STEM department chairs identified dual career as a major barrier to hiring women. The challenges include communication among departments and colleges, and funds to hire the partner.

The ADVANCE office sends a letter to every short-listed applicant for every faculty position. It notifies the candidate that if s/he has a partner who might qualify for a position that would lead to UNL hiring a woman STEM faculty member into a tenure-track position, the candidate's partner should contact the ADVANCE office. Program Director Holmes requests the partner's curriculum vitae and a letter of interest. Holmes shares this information with Evelyn Jacobson in Academic Affairs, the Dean(s) of the college(s) affected, the Department Chair for the primary hire and the Department Chair for the partner hire.

If a candidate receives an offer, and the department that would hire the partner agrees (along with appropriate administrative approval), the partner is brought to UNL for an interview that is paid for by ADVANCE funds. If hired, the ADVANCE office funds one-fourth of the salary of partners for three years (bridge funding).

Evaluation: We budgeted for eight dual career hires in the proposal and have hired seven to date. With judicious juggling of unspent funds and recycling the first hires (their 3 years will be up next year), we expect to keep the program going. Department chairs are very supportive of the program.

The Bureau of Sociological Research (BOSR) at UNL interviewed 27 of the new STEM hires from the 2009-10 search year, including six involved in dual career hiring. Three out of four dual career respondents (2 did not answer the question) said that the main reasons for accepting the offer at UNL is the dual career program.

PROGRAM 1.2 RECRUITMENT AMBASSADORS

Results of Dual Career Program.

Year	# Searches	# STEM Searches with Dual Career	# Dual Career Hires
2008-09	84 total 26 STEM	8	3 hires 1 in process*
2009-10	39 total 13 STEM	7	4 hires 1 in process*
2010-11	67 total 14 STEM	3 to date	1 in process*

* In College of Engineering; still under consideration pending budget outcomes. These are spouses of existing faculty.

We learned from Social Science departments that sending faculty members and department chairs to professional meetings to find qualified women to invite to apply for UNL positions increases the quality and quantity of applications. Therefore we designed this program to actively recruit STEM women to apply. Initially we asked Ambassadors to travel for the sole purpose of recruiting, but we learned from faculty that they wish to continue their professional work at meetings. We eliminated this requirement. We have since had three requests for a Recruitment Ambassador. However, there are departments that are simply beginning to recruit at conferences on their own, without using ADVANCE funds. Unspent funds have also been used for salary for Evelyn Jacobson (see Significant Changes/Personnel Changes, p. 5).

PROGRAM 1.3 DEPARTMENT GRANTS TO RECRUIT WOMEN TO APPLICANT POOLS

The goal of this program is to provide funds to departments to try innovative ideas to increase the number of women in applicant pools. We have had no applications for this program. When we asked department chairs why they were not using this program they said they could not imagine ideas beyond what they were already doing.

PROGRAM 1.4 DEPARTMENT VISITS TO DISSEMINATE INFORMATION ON ADVANCE OPPORTUNITIES

Beginning year 3 in fall, 2010, we added 9 additional target departments from the Institute of Agricultural and Natural Resources. For this program, Evelyn Jacobson, Susan Fritz, and when available, Mary Anne Holmes, will visit each department to disseminate information about the program and to listen to faculty concerns about gender equity at UNL.

Evaluation: From three department faculty meetings to date, we learned that departments appreciate the information that they gain and that they appreciate the dual career program.

PROGRAM 1.5 VISITS TO SEARCH COMMITTEES

During the current fiscal year, the number of searches in STEM departments has declined from a typical 30-40 to 13. We are taking advantage of this situation to meet with each search committee and/or department chair to disseminate the Recruit Committee's Best Practices for Recruitment (see Program 2.1), data on the applicant pool in that discipline, sample letters to potential applicants inviting them to apply to UNL, and to listen to concerns and offer help.

Evaluation: Evelyn Jacobson, Susan Fritz, and Mary Anne Holmes have met (in various combinations) with each search committee in late summer and fall, 2010. We learned from one committee that they did not know that they could invite people to apply; another committee heard about these visits and proactively called to schedule their own. Our sense is that the committees have found the data and information that ADVANCE supplies very helpful.

PROGRAM 1.6 NOTICES ON ADS EXPRESSING INSTITUTIONAL COMMITMENT TO ADVANCE GOALS.

Within three weeks of finalizing the cooperative agreement, the Chancellor's Senior Administrative Team mandated that the following wording appear on every ad for faculty positions (see box at right).

2. INTERACTIONAL: MAKE FACULTY SEARCH PROCEDURES MORE PROACTIVE AND REDUCE IMPLICIT BIAS IN FACULTY EVALUATION PROCEDURES.

PROGRAM 2.1 RECRUIT COMMITTEE

The goal of the Recruit Committee is to assist faculty to be more proactive so that applicant pools will meet or exceed the

proportion of women with PhDs in disciplines. This committee of six faculty compiles and keeps current national data related to achieving the ADVANCE goals. They glean data from NSF Survey and Statistics reports, Graduate Council, and disciplinary reports.

The Recruit Committee developed a one-page handout outlining Best Practices for recruiting more women to applicant pools. They presented data and the Best Practices at two of the 2009 chair workshops (see Program 2.4) and at two "Conversations" (panel discussions, a new initiative; see Program 3.4) with faculty. The Best Practices handout is disseminated at appropriate ADVANCE-sponsored events and is posted on our website

(<http://advance.unl.edu/recruitne/>).

UNL Faculty Job Ad Tagline

"The University of Nebraska has an active National Science Foundation ADVANCE gender equity program and is committed to a pluralistic campus community through affirmative action, equal opportunity, work-life balance, and dual careers."

Dissemination: The best practices handout is now disseminated to all search committee chairs through the Office of Equity, Access and Diversity, and is therefore institutionalized when the committee chair is designated.

PROGRAM 2.2 PROMOTE COMMITTEE

Based upon social science research on implicit bias, we assumed that UNL would need to educate faculty about and create procedures for minimizing the impact of implicit bias in evaluation of faculty for hiring, retention and promotion. The goal of the Promote Committee is to change the way that university members perceive the impact of implicit bias on evaluations and to provide mechanisms to minimize its impact. They created and presented a summary of research on implicit bias and are incorporating University of Washington videos portraying implicit bias in a typical search committee meeting. The Promote Committee presented at two of the 2009 chair workshops (see Program 2.4) and two Conversations with faculty (see Program 3.4).

Dissemination: The implicit bias power point presentation is on the ADVANCE web page (<http://advance.unl.edu/promotene/>).

PROGRAM 2.3 SHOWCASE VISITS OF STEM WOMEN / THEIR MENTORS

The goal of the showcase visits is to enhance the perception of women as candidates for STEM faculty positions and to show the strengths of UNL for potential women faculty. Located in a moderately sized Midwestern city, we strive to increase positive perceptions of Lincoln and UNL to potential STEM women faculty applicants. Bringing mentors and women PhDs to campus, we both enhance their perceptions of UNL and enhance the image of women STEM PhDs to UNL Faculty.

Evaluation: We had no departments apply for funds in the first year, one department applied in the second year, and three in the third year. We have found that several departments have simply adopted the practice of inviting potential applicants or mentors of potential applicants to their normal seminar/colloquium series. We shifted some unused funds to pay for travel expenses for Dual Career partners of short-list candidates.

PROGRAM 2.4 CHAIR WORKSHOPS

We held a series of three workshops to provide tools for hiring, retaining and promoting women in STEM disciplines in fall, 2009. We presented UNL data from focus groups results of search chairs (see pg. 5) as well as published research on Best Practices. We disseminated information on UNL's Work-Life Balance policies. We conducted a workshop with chairs in January 2011 to review annual data from 2001-09 for each department, i.e., the number and proportion of women in applicant pools, hired, and on the faculty by rank. Thirteen of 26 chairs attended and most stayed late in active discussions on how to improve the data and how to improve the actual numbers of STEM women faculty.

Evaluation: Before conducting the 2009 workshops, we fielded a survey to workshop registrants to learn what "Best Practices" were already in use at UNL. A post-event survey asked the same set of questions. Most respondents said that they would try new search procedures and that the workshop series was useful (for detail, see 2nd Annual Report 2009-20, pp. 23-24).

3. INDIVIDUAL LEVEL: RETAIN AND PROMOTE WOMEN INTO LEADERSHIP BY SUPPORTING WOMEN FACULTY DEVELOPMENT

Through data from UNL's Institutional Research and Planning on faculty exits and climate survey data by rank, we learned that we needed to add a focus on retaining faculty.

PROGRAM 3.1 PROFESSIONAL DEVELOPMENT WORKSHOPS

We have provided three COACH workshops: "The Art of Strategic Persuasion/Strategies for Leading Change" (twice; one too recent to include in evaluation) and "Powerful Presentations"; and two workshops by Bonnie Coffey of Contacts Count around the theme of networking

CHANGE TO PROGRAM

The RECRUIT and PROMOTE committees recognized overlap in their work. They have reorganized by combining into one committee with two subcommittees: one focused on hiring practices and the other on retention. Both committees see "culture change" as their overarching theme. They have added the goals of "building a network of STEM faculty," developing a coaching manual for search committee chairs, and the promotion of women for awards and leadership.

strategies. In addition, Dana Britton of Kansas State presented her research on the promotion to full process for STEM women.

Evaluation: On average, 24 people attended each of the four professional development workshops between September 2008 and April 2010, with attendance increasing from 24 people at the first workshop to 33 people at the most recent one. Workshop evaluations were very positive. Details on attendee demographics will be provided during the onsite presentation.

PROGRAM 3.2 WRITING RETREATS

Faculty success at research-intensive institutions depends upon writing productivity. Research on academic writing emphasizes that scheduled time to write and feedback from peers enhance writing success. We held week-long writing retreats in 2009 and 2010. Attendance was low for the first retreat (9) but higher for the second (16), with several returning for the second retreat. The retreats are held in Love Library. ADVANCE supplies breakfast, snacks and lunch throughout the week. On the second day, a writing coach provides tips for writing clearly and maintaining productivity. Participants review each others' work.

Evaluation: Nearly all participants agreed that they learned something from the retreat that will be helpful with their career; nearly all were able to finish projects that had been languishing. Participants valued time to focus on writing without outside distractions. We plan to continue the writing retreats for each of the next three years.

PROGRAM 3.3.PATHS TO SUCCESS LUNCHEONS

The goal of this program is to provide examples of how women achieved success and to provide a setting for informal networking. We used the University of Washington's lunch speaker program as a model. We held 6 luncheons.

CHANGE TO PROGRAM
 "Paths to Success"
 luncheons replaced by
 "Conversations" series.

Evaluation: Attendance was higher for the first few luncheons compared to the last few (n = 61 for the first luncheon to 26 for the last in April, 2010; average = 39). Additionally, evaluation comments suggested a need for specific topics rather than overall careers.

PROGRAM 3.4 CONVERSATIONS FOR GROUP MENTORING FOR SUCCESS

"Conversations" are a series of panel discussions with UNL and guest presenters on a variety of topics relevant to academic and personal success at UNL. The goal of "Conversations" is to reach specific audiences on various topics, such as "Starting Up a Lab" for new faculty (47 attended; we expected about 30), "Faculty Searches", "maintaining a publication stream", and the nomination process for internal and external awards for more experienced faculty. In addition, it is an opportunity to engage more faculty on campus in ADVANCE activities. During Spring Semester, we will hold discussions on STEM teaching innovation and challenges; post-tenure productivity strategies, and preparing for next year's searches.

Evaluation: responses to the Conversations have been uniformly positive. Attendance varies by topic (from 17 to 47), with an average of 28 faculty at each event.

III. RESEARCH RESULTS

1. NETWORK AND CLIMATE SURVEY

During fall 2007, we developed a Faculty Network survey and adapted the COACHE survey for administration to all UNL STEM faculty (not just pre-tenure faculty). In spring 2008, the Bureau of Sociological Research (BOSR) administered the Network and COACHE surveys to UNL STEM faculty via the web. In fall 2008, BOSR provided de-identified data to Dr. Falci. The data were cleaned and recoded and a codebook was written that identified and described all variables. Several studies are currently underway, with one paper submitted to *Social Problems*.

The network survey queried faculty on numbers and strengths of ties in three types of networks: friendship, research, and committee co-membership. Friendship ties (lunch together; playing squash, etc.) are the most "voluntary", while committee co-membership is the least: it is something faculty must do for their jobs. Research ties fall in between these two.

Key Findings include:

2008 Faculty Response Rate:

60% for Network survey
 45% for UNL COACHE survey

- Women and non-white men report *fewer* direct connections within departmental friendship networks compared to white men. There are neither gender nor race differences in the number of direct network connections for departmental research or committee co-membership networks. Non-white men, however, are the least likely to be connected to well-connected actors in their departmental committee, research and friendship networks. In other words, non-white men are the most globally peripheral actors in departmental networks.
- Having more research or friendship connections is associated with greater satisfaction with departmental climates. Only friendship connections, however, significantly predicted organizational commitment; more friendship ties increases organizational commitment.
- Women with network ties to women and men in research or friendship networks report higher levels of collegiality compared to women who primarily have ties to other women.
- Department-level climate perceptions are more positive when clustering is high within research exchange networks. Clustering within departmental friendship networks is associated with less positive climate perceptions.
- Non-white men report lower job satisfaction compared to women and white men. Unfair treatment perceptions and fewer professional interaction satisfaction among non-white men explains their lower levels of job satisfaction compared to white men, but not women. Upon controlling for perceptions of family friendliness or unfair treatment perceptions, women report significantly higher levels of job satisfaction compared to white men.

2. ADDED RESEARCH

2.1 FOCUS GROUPS OF SEARCH COMMITTEE MEMBERS

The BOSR conducted focus groups with faculty search committee chairs in spring, 2009, to gather insight from faculty about how the search process operates in different departments. A total of three focus groups (14 faculty) were held over the lunch hour and participants were offered a complimentary lunch. It was useful for search committee members from different departments and colleges to discuss their respective processes together. We compiled these practices into a guidebook for search committees that is still being edited.

We use results from these groups to inform workshops for department chairs/heads and workshops and panel discussions for search committee members.

2.2 NEW HIRE INTERVIEWS

Ninety percent of new STEM hires from 2009-10 to were interviewed by BOSR. We learned that 33% of women learned about the job opening by word of mouth; only 6% of men did. Fifty percent of men learned about the job online.

One-third of women accepted the position at UNL in part because of the collegial and supportive faculty they encountered during the interview. Seventeen percent of men gave this response. The major response for all new hires was “the compensation package”.

IV. SIGNIFICANT CHANGES TO PROGRAM AND RATIONALE

1. ORGANIZATIONAL STRUCTURE

Vice Chancellor for Research and Economic Development Dr. Prem Paul assumed the role of PI for ADVANCE-Nebraska when our initial PI, Senior Vice Chancellor for Academic Affairs, Barbara Couture, left UNL to become president of New Mexico State, effective January 1, 2010. Dr. Evelyn Jacobson joined the ADVANCE-Nebraska team as Academic-Administrative Director, a link between the ADVANCE office and the Office of the Senior Vice Chancellor for Academic Affairs, effective July 1, 2010 and funded by unspent Recruitment Ambassador and Dual Career funds.

2. UNSPENT RECRUITMENT AMBASSADOR AND DEPARTMENTAL GRANT FUNDS

Some of these funds have been re-directed to research, including the focus groups of search committee chairs, exit interviews, new hire interviews, to pay for Dana Britton of Kansas State to include us in her research on STEM associate professors. In addition, we have hired a Marketing major.

The only new chair opening in 26 STEM departments, 2008-10, was filled by a woman in January, 2011: Dr. Valery Forbes, School of Biological Sciences.

3. PERSONNEL CHANGES

Co-PI Stephanie Adams left UNL; she was replaced by Dr. Namas Chandra, Associate Dean for Research in the College of Engineering.

We hired a senior Marketing major to work 10 hours/week to create the E-News, printed material, and help with design for the website.

4. CHANGES TO TIMELINE

We added the nine Institute of Agricultural and Natural Resources departments one year early, beginning year 3 rather than year 4. We did this because we felt that the program is being successfully implemented in the original two colleges, and were ready to expand to departments eager to join ADVANCE-Nebraska.

V. IMPACT OF ADVANCE ON UNL

We have strong STEM chair support of ADVANCE goals, and we note STEM chairs' dedication to the project and a bit of competitive spirit among them to have the best numbers at our gatherings. They need little prodding from our deans, although our three deans have been unflinchingly helpful in pressing ADVANCE goals in their colleges.

We have initiated a dialog among STEM faculty on the search process. We are beginning to see a shift in attitude from "Send out the ad and wait for the applications" to a much more proactive "search is an active verb" strategy. The proportion of women in the applicant pools has increased (Fig. 1), and chairs asked us to note that the quality of the applicants has increased substantially.

We have hired a strong cohort of dual career hires that are beginning to raise expectations on campus that proactive strategies for dual career couples should become our norm.

The numbers of women on the faculty in the College of Arts & Sciences has been on upward trajectory (Fig. 2). Our key challenges are: 1) hiring and retention of women at Full Professor rank in all colleges; 2) hiring and retention of Assistant Professor women in the Colleges of Engineering and IANR; 3) increasing the number of women in STEM chair positions from zero prior to Valery Forbes' hire (School of Biological Sciences).

We work with Women's and Gender Studies to co-host internal and external speakers. The strategic plan for WGS includes the development of a new area of emphasis: Gender and Science Matters. The plan includes permanent staffing for existing and new Women in Science courses and for the hiring of a new faculty member whose tenure home will be determined by the candidate's specialty (e.g., social or behavioral sciences or a scientific discipline).

VI. INSTITUTIONALIZATION

We currently have two proposals under review by the administration: 1) to institutionalize the dual career program and 2) to implement the Chancellor's support of the ADVANCE office for five years beyond the life of the grant. That office will potentially continue professional development programs, search support, and informal networking opportunities.

Figure 1. Women in STEM Applicant Pools at UNL.

N above bars = total number of women in pool.

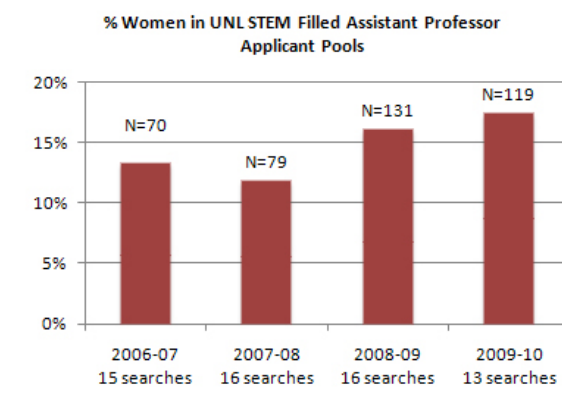


Figure 2. Numbers of STEM Women Faculty by College and Year.

