

Year 1 Annual Report Summary
ADVANCE Institutional Transformation at Kansas State University

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Activities and Findings

Research and Education Activities:

Our ADVANCE Institutional Transformation Project was designed to address three barriers to women's advancement in science, engineering, and mathematics (SEM) at Kansas State University (K-State): lack of effective recruitment, exclusion from networks, and subtle biases working against them. We had four goals at the inception of the project. These were: 1) To institute changes in existing departmental policies, procedures and practices, and develop new ones as needed to foster a gender-equitable climate within partner departments; 2) To expand and enhance departmental recruitment practices to attract more women applicants and ensure that candidates are not subject to subtle bias in the search and hiring process; 3) To implement effective programs that foster the careers of women faculty and encourage their retention through tenure and promotion; and 4) To propagate the successes achieved in partner departments to all SEM departments.

Since our project did not begin until October 1, 2003, this report covers our activities to date, i.e. the first three quarters of grant year one. Our project activities during this first year addressed goals 1-3 above. These activities are presented below in a chronological list with numbers in parentheses indicating the project goals each activity was intended to address.

Year One Activities to Date:

- 1) PIs defined project organizational structure. Our current organizational chart is available on our ADVANCE project website. (Goals 1, 3)
- 2) Steering Committee interviewed and selected Project Coordinator. (Goals 1, 2, 3)
- 3) PIs invited Alice Hogan, ADVANCE Program Director, to campus for high visibility Provost's Lecture Series event to initiate the project.(Goals 1, 3)
- 4) PI Montelone and Project Coordinator met with all partner departments and colleges to provide information on project, its initiatives, and opportunities for participation by faculty. Also presented information on project to K-State Commission on the Status of Women and met with them to discuss women's resource website to be developed as part of the project. (Goals 1, 2, 3)
- 5) PIs and Evaluator developed a mechanism for monitoring progress of project-wide, college-wide, and departmental initiatives (modified Gantt charts). (Goals 1, 2, 3)
- 6) Project Coordinator developed a line-item budget tracking system to monitor all ADVANCE expenditures. Developed grant guidelines for the partner departments, clarifying allowable expenses, funding availability timeframes, and tri-annual reporting requirements. Established matching accounts for each of the four Colleges. (Goals 1, 2, 3)
- 7) Executive and Steering Committees undertook a series of discussions to create, define, and review the template for and content of the Career Milestones for Academic Personal Success (MAPS) initiative using the Gantt chart format. (Goals 1, 3)
- 8) PIs and Project Coordinator met with evaluation team to discuss assessment strategies and submitted IRB approval request. (Goals 1, 2, 3)

9) Held first set of three Equity Action Workshops in February 2004, with Dr. Virginia Valian, 'Using Research on Gender to Create Equity'. Faculty members from six partner departments were invited, together with members of the Internal Advisory Board. 61.2% of all faculty members (62.5% of all women faculty members) from partner departments were in attendance. The purpose of the Valian workshops was to make faculty members aware of the barriers, attitudes, and other factors that disproportionately negatively impact women's advancement. Dr. Valian met with the Steering Committee over lunch and with the Executive Committee over dinner. (Goals 1, 2)

10) Held second set of three Equity Action Workshops in March 2004, with Dr. Cynthia Burack, 'How Websites Can Communicate a Message of Inclusiveness'. 48.2% of all faculty members (62.5% of all women faculty members) from partner departments were in attendance. The purpose of the Burack workshops was to make faculty members aware of the importance of using inclusive language, images, and forms of communication within groups and institutions. Particular attention at the workshop focused on the role of websites. Dr. Burack also met with web managers and faculty members charged with web design from partner departments for a discussion of their issues and concerns. Dr. Burack met with the Steering Committee over lunch and the Executive Committee over dinner. The Departments of Diagnostic Medicine and Pathobiology and Chemical Engineering have revised their websites and received feedback from Dr. Burack for further changes. (Goals 1, 2)

11) Executive Committee established eligibility for and format of seminar series; this was named the ADVANCE Distinguished Lecture Series and the call for proposals was issued. Thirteen awards for tenure-track women faculty in SEM disciplines to host speakers in Spring, Summer and Fall 2004 were made. Each award provided partial travel funding, with host departments or colleges providing the remainder of support for travel, honoraria, and other expenses. Two women hosted seminars in Spring 2004. (Goal 3)

12) Hosted Dr. Nancy Hopkins of the Massachusetts Institute of Technology as part of her visit to campus in April 2004. She gave the inaugural presentation of the ADVANCE Distinguished Lecture Series, speaking to a general audience on MIT's response to the study she co-authored on the status of women in science. (Goal 1)

13) All four participating colleges agreed on guidelines for and inaugurated specific programs to benefit or enhance the numbers of SEM women faculty in their colleges.

Agriculture offered a series of small (ca. \$1200) Professional Development Awards, to be used to travel, attend conferences, or initiate pilot research studies. To date, 10 of these awards have been made for travel, visits to collaborators, and conference attendance over the summer and early fall. (Goal 3)

Arts & Sciences created a program designed to advance women into administrative roles, the Administrative Shadowing Program; to date, one woman has formed a shadowing relationship with a department head. This professional development experience will occur in summer and fall 2004. (Goal 3)

Engineering has designed two programs; one focused on recruitment and the other on retention and professional advancement. Recruiting to Expand Applicant Pools (REAP) supports department heads and/or senior faculty on recruiting trips to sites likely to have large numbers of eligible women faculty candidates. Chemical Engineering has applied for REAP funding and will be making recruiting visits in the fall. (Goal 2)

The retention program, Research Enhancement Visits (REV), provides travel funds to tenure-track women faculty members to allow them to visit national laboratories or travel to collaborate with colleagues elsewhere. To date, six REV awards have been made and visits will occur in the summer and fall. (Goal 3)

Veterinary Medicine has used its funding to create a group mentoring program, Parallel Paths, open to both men and women faculty members. Faculty members participated in one college-wide seminar and one, half-day retreat to assist in the development of the program. Following this, two groups of 9-10 faculty members each, consisting of both tenure-track and tenured faculty members, were formed, with three senior faculty mentors facilitating each group. Each group meets monthly over dinner and has a specific agenda for discussion about career advancement among the group. Group members are also eligible for small research enhancement grants. Assessment surveys are being developed to measure the impact of the program. (Goal 3)

14) PIs Montelone and Dyer developed initial guidelines for the Career Advancement Program (CAP) for tenured women faculty members in SEM departments. These were subsequently refined following discussion with Steering Committee members. The initial call for proposals will occur in August 2004, with the awards to begin in October 2004.

15) PIs Montelone and Dyer initiated discussions with the new Women in Engineering and Science Program (WESP) Director, Dr. Kimberly Douglas, in regard to WESP's role in implementation of the Academic Career Exploration (ACE) Program. ACE is a mentoring program for undergraduate women in science, engineering, and mathematics. It is intended specifically to encourage undergraduate women of color to consider careers in academia. This initiative is in the beginning stages with organizational meetings scheduled for fall 2004.

16) PIs Montelone and Dyer met with analysts from the K-State Office of Planning and Analysis to begin discussion of data collection data for the set of twelve NSF indicators. Planning and Analysis provided data to the PIs to review. (Goals 1, 2, 3 and the NSF Indicator data collection process)

17) PIs Montelone and Dyer and the Project Coordinator met with the Office of Educational Innovation and Advancement (OEIE) several times to discuss evaluation methods and procedures. OEIE developed, implemented, and summarized pre- and post-surveys for the two Equity Action Workshops and is developing evaluation methods for the Parallel-Paths program.

18) Steering Committee developed template for analysis of start-up offers (NSF Indicator). This template is being used currently to collect information for this indicator. (Goals 1, 2, 3 and the NSF Indicator data collection process)

19) Project Coordinator hired two graduate research assistants, an undergraduate office assistant, and a web assistant. (Goals 1, 2, 3)

20) Graduate research assistant Sankaran met with PIs to discuss the process of gathering the data for analysis of office and research space. He is in the process of collecting these data. (Goals 1, 2, 3 and the NSF Indicator data collection process)

21) Partner departments were charged with policy review and revision (tenure and promotion and other internal review documents) and website revision. These studies and activities are being conducted during the summer and fall of 2004. (Goals 1, 2)

22) PI Montelone described project at Marshall University panel in April 2004. (Dissemination)

23) PI Montelone presented a paper, coauthored by PI Dyer, at the Women in Engineering Programs and Advocates Network (WEPAN) National Meeting in June 2004. (Dissemination)

24) PI Dyer began series of conversations with incoming K-State Provost Duane Nellis to create a Special Assistant to the Provost position to provide central administrative experience for women faculty. This position will be supported by grant indirect cost return funds. The call for nominations and applications will be distributed in August 2004, with the first appointment expected to begin January 2005. (Goal 3)

Findings:

We report here the findings available to date from our project activities; our project has just completed its third quarter, so our findings are by necessity limited. Most of our project initiatives are in the very early stages of implementation and no findings are yet available. We are reporting on the process of creating our Career MAPS template, the development of the ADVANCE Distinguished Lecture Series, and the assessment results from our first two Equity Action Workshops.

Career MAPS

The process we used to create the template for the Career MAPS initiative was one that also served as a catalyst for team building and collaboration among the Executive Committee, the Steering Committee, and the unit heads

of our partner departments. The proposal contained the essence of this initiative, which to the best of our knowledge is unique, but was lacking the details for implementation. Thus, this initiative was developed de novo through a series of discussions among the Executive and Steering Committees, and then was refined via input from the unit heads of our six partner departments. This was the first opportunity to fully engage the members of the Steering Committee and the partner department heads in the work of the ADVANCE project. It established a model for the free exchange of ideas among these individuals; we have used this model as we have developed the other initiatives, created templates for gathering indicator data, and designed reporting forms for project initiatives.

Questions and concerns raised by Steering Committee members and partner department heads during development of the Career MAPS template allowed us to better understand some of the issues with regard to its implementation. These included whether the Career MAPS would be viewed as a contract that could impact the tenure or promotion process, the differences between Career MAPS and annual work plans that faculty members already submit, and ensuring that the Career MAPS are consistent with existing stipulations in the departmental tenure and promotion documents. The template that resulted from these discussions is versatile and flexible, allowing individualized MAPS to be created that address circumstances specific to faculty members in particular departments and who have a variety of aspirations. These templates are being used currently with untenured women faculty members in our six partner departments. We will seek feedback on its use from the partner department heads and the untenured women faculty through an assessment instrument this fall. This information will help us further refine the template for subsequent use with tenured women faculty members. In the second project year, we plan to expand use of Career MAPS to untenured and then to tenured male faculty members in the six partner departments.

ADVANCE Distinguished Lecture Series

Of the thirteen awards made to date for untenured SEM women faculty members to host speakers as part of the ADVANCE Distinguished Lecture Series, two of these visits have thus far taken place. We have developed a reporting form to collect information about the benefit and impacts of participation in this initiative. For both of the visits that have occurred, the women hosts reported strongly positive interactions with their guest speakers and discussions are underway for future interactions, including reciprocal visits by the K-State faculty members. We will be collecting data from each of the SEM women faculty members who host a speaker, and we plan to conduct focus groups among these women to collect additional information.

Equity Action Workshops

Two Equity Action Workshops were held in Spring 2004. These were led by our consultants Dr. Virginia Valian and Dr. Cynthia Burack and were attended by faculty members and administrators from our six partner departments. Our evaluation team created a series of assessment instruments to measure the perspectives of attendees on the value of these workshops and to collect other information, including baseline perceptions and knowledge of gender issues. Pre- and post-surveys using a 5-item Likert scale were conducted online for both workshops. The responses to survey questions were analyzed on the basis of the sex of the respondents. We are reporting the outcomes of a few of the questions for which there was a dramatic change in attitude as a result of workshop attendance and for which the sex of the respondent was a large factor. A more in-depth analysis will be performed at a later time.

Questions on the surveys for the Valian Workshop were designed to test the participants' understanding of subtle biases and their effects on the evaluations of students, faculty applicants, and faculty candidates for tenure and promotion. There were significant differences between the responses of men and women to questions that asked if the respondent agreed with statements that women faculty are treated fairly throughout the promotion process or in the granting of tenure. In the pre-survey, 84% of men strongly agreed or agreed somewhat with the statements, while only 53% of women strongly agreed or agreed somewhat. The percentages of both men (65%) and women (30%) who strongly agreed or agreed somewhat with these statements were reduced on the post-survey. Another statement that received significantly different agreement rates between the sexes and for which agreement was substantially greater on the post survey than on the pre-survey was 'Women advance their careers more slowly than men.' These results indicate that following the workshop both men and women changed their attitudes about the effects of subtle biases on the careers of women faculty members. However, more women

believed their participation in the workshop was important than did the men. 50% of men who attended this workshop thought that their attendance at the workshop was both important and necessary, while 70% of the women thought their attendance was important and necessary. These numbers did not differ between the pre- and post-survey results. Additional analysis of the survey results will be necessary to discern trends in perceptions of men vs. women and the impact of the workshops.

Questions on the surveys for the Burack Workshop focused on evaluating participants' understanding of the explicit and implicit messages sent by departmental websites and recruiting literature, and how to incorporate more inclusive messages in these communications. The pre-survey asked questions about the quality of the department website. There were significant differences between the responses of the men and women to the question that asked if the department website depicted the mission of the department. 74% of men agreed strongly or somewhat strongly with this statement, while only 43% of women agreed strongly or somewhat strongly. The other statement that resulted in a significant difference in responses was 'the department website reflects a community environment within the department.' 50% of men agreed strongly or somewhat strongly with this statement, but only 18% of women agreed strongly or somewhat strongly. These results show that women have different perceptions about the messages being conveyed by their department websites.

Outreach Activities:

Dr. Alice Hogan, NSF ADVANCE Program Director, gave a university-wide lecture as part of the Fall 2003 Provost's Lecture Series. Faculty, administrators, staff, and students from across the university attended her presentation, and this was the first opportunity for a number of the attendees to learn about the ADVANCE program and the issues it addresses.

Dr. Nancy Hopkins, Amgen, Inc. Professor of Biology at MIT, presented an ADVANCE Distinguished Lecture in Spring 2004 on the MIT study of the status of women faculty in science. She recounted the struggles she and her female colleagues faced, and this lecture provided the attendees with additional insight into the problem of gender discrimination.

Journal Publications

B. A. Montelone and R. A. Dyer, "ADVANCE Institutional Transformation at Kansas State University", 2004 WEPAN National Conference Proceedings, Available online at <http://www.x-cd.com/wepan04/1096.pdf>, p. N/A, vol. N/A, (2004). Published

Other Specific Products

Product Type: Data or databases

Product Description:

We are in the process of collecting the baseline data for the NSF ADVANCE indicators.

Sharing Information:

These data will be available via a link from our ADVANCE project website and will be shared at the NSF ADVANCE PIs meetings and at other appropriate meetings, retreats, and conferences.

Product Type: Instruments or equipment developed

Product Description:

We have developed several assessment, reporting, and career planning instruments that will be used to collect data for the NSF Indicators and in conjunction with several of our department-level, college-level, and project-level initiatives. These instruments include pre- and post-workshop surveys of faculty attitudes and knowledge for our Equity Action Workshops, the Start-up Package Template, the Space Analysis Data Template, the Career MAPS Template, and the Website Review Rubric. These instruments will be made available on our ADVANCE Project website.

Sharing Information:

These instruments can be shared with other researchers involved in gender equity studies and can serve as models for others to use as they create and assess similar programs.