Kansas State University ADVANCE Institutional Transformation Project Year Two 4th Quarter and Year Three Activities to Date

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.

We report here on project activities occurring since our last annual report. This covers the period July 1, 2005 through June 30, 2006, which represents the last quarter of project year two and the first three quarters of project year three. Our activities are organized according to the level at which they were designed to have an effect: at the level of the entire project (27 SEM departments in four SEM colleges), at the college level, or at the department level. We have included in parentheses after each activity description the goal it was intended to address.

Executive and Steering Committees

- The Executive Committee met monthly to discuss the progress and policies of the ADVANCE project. One of the project Co-PIs, Dr. Terry King, Dean of Engineering, will assume the position of Provost at Ball State University on July 15, 2006. We will be removing him from Co-PI status. An internal interim dean, Dr. Richard Gallagher, has been appointed. Dr. Gallagher has served as a member of the K-State ADVANCE Steering Committee since the beginning of the project. We plan to include him as a Senior Personnel on the grant for the remainder of the project. When a new dean of engineering is selected, that person may be added as a Co-PI on the project and as a member of the Executive Committee, depending on the date of appointment. The members have identified specific initiatives within each college that they plan to institutionalize after the end of the grant period. (Goals 1-4)
- The Steering Committee met monthly to coordinate and guide the direction of the project initiatives. This committee reviewed the ADVANCE Distinguished Lecture Series (ADLS), Career Advancement Program (CAP), and Internal Advisory Board (IAB) Initiative proposals and made funding recommendations to the PIs. (Goals 1-4)

Project-level Activities:

ADVANCE Distinguished Lecture Series (ADLS)

• The project hosted an ADVANCE Distinguished Lecture (ADLS) Series panel luncheon. We invited all eligible participants (tenure-track women faculty), their department heads, and deans to a panel luncheon to learn more about the ADLS program and the benefits of and suggestions for hosting a speaker under its auspices. The panel consisted of four women, each representing one of our four SEM colleges, who spoke about their experiences in hosting a distinguished lecturer (Goal 3, 4).

- Compiled ADVANCE Distinguished Lecture Series (ADLS) tips for success. We are creating a brochure on incorporating these tips and the brochure will be made available to all new prospective hosts at the start of the Fall 2006 semester. (Goal 4)
- Calls for proposals were issued for the ADLS in Fall 2005 and in Spring 2006. We also have issued another call with applications due in September 2006. The outcomes of seminars that have occurred to date are reported in the Findings section. (Goal 3)

Career Advancement Program (CAP)

• One call for proposals for the Career Advancement Program (CAP) for tenured women faculty members in SEM departments was issued. Seven awards have been made. (Goal 3)

Equity Action Workshop

• An Equity Action Workshop on Faculty Leave Policies was conducted in September 2005. It was facilitated by PIs Dyer and Montelone and featured a presentation by Mr. Gary Leitnaker, Assistant Vice President of the K-State Division of Human Resources on current K-State leave policies. Following the workshop, we conducted a survey of all SEM faculty members and SEM department heads on their perceptions of issues related to faculty leave. (Goals 1, 3, 4)

Academic Career Exploration (ACE)

• PIs Montelone and Dyer continued discussions with the Women in Engineering and Science Program (WESP) Director, Dr. Kimberly Douglas, in regard to the implementation of the Academic Career Exploration (ACE) Program. This program was designed to acquaint women SEM students of color with academic career options. However, first-year and sophomore women students of color are primarily concerned about ensuring their academic success and post-baccalaureate planning is not a paramount goal. Thus, the Executive and Steering Committees decided this initiative would not be effective as originally designed. Since our ADVANCE proposal was written, other programs have been created that have similar goals to ACE. These include the Graduate School-sponsored Consortium of Undergraduate Research Experiences and WESP Distinguished Lecture Series Luncheons. We feel that these programs, while not uniquely targeting SEM women students of color, will fill the niche that was intended for the ACE initiative. Since the leadership of these programs overlaps with that of our ADVANCE project, we feel certain that the needs of the ACE target audience will be met, and we do not plan to further pursue this initiative. (Goal 2)

Special Assistant to the Provost

• Continued the Special Assistant to the Provost position to provide a semester-long central administrative experience for faculty members. Six individuals have been selected for this position to date, two white females, one African-American female, one Asian male, and two white males. The terms of appointment have been for Spring, Summer, and Fall 2005, Spring and Fall 2006, and Spring 2007. Funding for this position is provided through grant indirect cost return. (Goal 3)

Websites

- The guidelines, reporting forms, upcoming events, and resources for all K-State ADVANCE initiatives were maintained on the K-State ADVANCE website. (Goals 1-4)
- The Work/Life website created by ADVANCE was advertised to all SEM faculty and staff. (www.ksu.edu/worklife) (Goals 2-3)
- The ADVANCE office staff has started the planning for a "Women Leaders at K-State" website, which will highlight the careers and biographies of women faculty, staff and administrators on campus. (Goals 1,4)

Campus Visits

- Hosted Dr. Judith Burstyn, Professor of Chemistry, University of Wisconsin-Madison, in January 2006. She led a workshop for deans and department heads entitled "Resources for Inclusive Teaching". The Steering Committee attended the workshop and an evening dinner with Dr. Burstyn. (Goal 3)
- Hosted Dr. Rita Colwell at a lunch with the Steering Committee in Fall 2005, as part of her visit to campus to deliver a Provost's Lecture Series presentation. (Goal 3)
- Prepared for a visit to our campus by Dr. Abigail Stewart, University of Michigan ADVANCE PI, to make a presentation on the STRIDE recruiting program and meet with selected small groups of faculty and administrators. The event had to be cancelled due to a family illness. (Goals 1,2,4)

Other Activities

• National award information and resources are being collected to assist and encourage faculty and department heads in nominating and promoting K-State women and men faculty for appropriate awards and recognition. (Goals 1,3,4)

College-level Activities:

All four participating colleges continued to conduct specific programs to benefit or enhance the number of SEM women faculty in their colleges.

- Agriculture sponsored a third round of Professional Development Awards. In this reporting period, 12 of these awards (ca. \$2000 each) were made for travel, visits to collaborators, and conference attendance. (Goal 3)
- Arts & Sciences made a third round of awards through the Career Enhancement Opportunities Program, and made 12 awards (ca. \$1000 each) during this reporting period. (Goal 3)
- Engineering conducted 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. No departments received REAP funding during this reporting period. (Goal 2)
 - The Research Enhancement Visits (REV) program provided travel funds to tenure-track women faculty members to allow them to visit national laboratories or travel to collaborate with colleagues elsewhere. In this reporting period, six awards were made to four faculty members. (Goal 3)
- Veterinary Medicine used its funding to continue to support the group mentoring program, Parallel Paths. The two established groups increased their membership from 9-10 faculty members to 11-14 faculty members each. Each group is composed of tenure-track and tenured men and women faculty members. Each group met monthly over dinner and discussed issues pertaining to career advancement. Group members also were eligible for small professional development grants. They continued their professional development seminar series and made four teaching awards in the college. Parallel Paths participants also created individual Career MAPS during their mentoring group meetings. (Goal 3)
- The College of Engineering used some of their college funds to support the attendance of two
 department heads at the University of Washington ADVANCE Leadership Workshop in July
 2005.

Department-level Activities:

- Partner departments prepared examples of faculty leave situations and participated in a faculty leave workshop in September 2005. (Goals 1, 3, 4)
- Partner departments received copies of their final website evaluations as prepared by Dr. Cynthia Burack, and they revised their websites according to the evaluation and Executive Committee recommendations. (Goals 1, 2)
- A joint Steering Committee/Partner Department Head meeting was held in April 2006. The partner departments summarized the progress they made on the ADVANCE project initiatives over the first project year and discussed goals for years 3 and 4. One new partner department head joined the project, in Fall 2005. (Goal 1)
- Two Internal Advisory Board meetings were held.
 - o In October 2005, the PIs gave an overview of the ADVANCE program so they can encourage and foster wider participation of eligible faculty within their own departments and provided information on the new IAB funding initiative so IAB members can implement ADVANCE initiatives within their departments.
 - o In April 2006, the PIs gave a status report of the ADVANCE progress to date as well as an update on the new IAB initiatives. (Goal 4).
- Round One IAB initiatives are listed below. The Round Two request for proposals has been issued, and applications are due July 15, 2006.
 - o The Department of Clinical Sciences is providing funding for tenure-track faculty members to pursue professional development activities that will help them achieve career milestones, such as tenure and promotion. This program will help institutionalize the Career MAPS initiative. The Department of Diagnostic Medicine and Pathobiology is a mentor for this project. (Goals 1,3,4)
 - The Department of Chemistry will host a visit by the University of Michigan CRLT Players. The presentation, "The Faculty Meeting" will highlight the faculty search and hiring process. All SEM departments will be encouraged to attend the performance. (Goals 1,4)
 - O The Department of Electrical & Computer Engineering is using Dr. Cynthia Burack's rubric to internally review the department website. The department head is working with junior faculty members to prepare Career MAPS. The department also is sponsoring an on-campus workshop "How to select the ideal graduate school" for potential graduate students. Selected faculty members will provide technical presentations and tours of the facilities. In addition, faculty members will travel to one or two universities with large numbers of women students to recruit students for the workshop. The Department of Chemical Engineering is a mentor for this project. (Goals 1-4)
 - The Department of Industrial & Manufacturing Systems Engineering is hosting a series of visits by alumnae who have or are pursuing a Ph.D. These women will share their perspectives and experiences with IMSE undergraduates, graduate students, and faculty members. The goal is to encourage more women students to consider pursuing graduate programs and academic careers. In addition, the department website is being updated to be more welcoming to women students and faculty members. The Department of Chemical Engineering is a mentor for this project. (Goals 1,2,4)
 - The Department of Mathematics is hosting a series of one-week visits by prominent women mathematicians. During their stay at K-State, these women are participating in the department's colloquium series, meeting with faculty and graduate students, and discussing

- particular research topics with women faculty. The anticipated outcomes for the visits include improving the climate for women within the department, advancing the reputation of the department outside of the university, and facilitating the hiring of more women mathematicians. The Department of Geology is a mentor for this project. (Goals 2,3,4)
- O The Department of Physics is planning a one-day workshop to build collaborations among men and women faculty in science and engineering. The workshop will begin with three lectures by female members of the National Academy of Sciences. In addition, nine senior women scientists and engineers from the Midwest who have worked to improve the climate for women faculty in the sciences and engineering will discuss obstacles to rapid career advancement of women faculty and best practices to overcome those issues. The department hopes to institutionalize the effort by encouraging annual workshops on this topic in the Midwest region. The Department of Physics is also conducting a review and revision of their website. Mentors for this project include the Departments of Biology, Chemical Engineering, and Women's Studies. (Goals 3.4)
- Project Coordinator Wood met with each new SEM department head and provided them with information about the ADVANCE program and its initiatives. (Goal 4)

Indicator Data:

- PIs Montelone and Dyer met periodically with staff members from the K-State Office of Planning and Analysis to discuss data collection for the majority of the 12 NSF Indicators for year three of the grant period and for 1997, which we are using as an historical benchmark year. (Goals 1-3 and the NSF Indicator data collection process)
- Project Coordinator Wood compiled information from departments on start-up packages, administrative positions, endowed/named chairs, and promotion and tenure committees (NSF Indicator). (Goals 1-3 and the NSF Indicator data collection process)

Assessment:

 PIs Montelone and Dyer and Project Coordinator Wood met with staff members of the Office of Educational Innovation and Evaluation (OEIE) periodically to discuss evaluation methods and procedures. (Assessment)

Assessment activities performed by OEIE in Year 3:

- o Developed, implemented, and summarized post-surveys for the Equity Action Workshop on Faculty Leave Policies
- o Conducted and reported on a focus group for Parallel Paths (Purrfect PRIDE)
- o Documented the ADLS Luncheon
- o Developed, implemented, and analyzed results of survey on the perceptions and applications of K-State leave policies in SEM departments
- O Conducted four focus groups to gather feedback regarding partner department website revisions and reported analysis of outcomes
- o Conducted interviews with ADLS awardees
- o Completed Year 3 Indicator Data report

Year 4 planned activities:

- Conduct interviews with new ADLS awardees and follow-up interviews with past awardees
- o Survey ADLS Speakers on their perceptions of the ADLS Program and their experiences
- Conduct a short survey to assess the impact of Parallel Paths on PRIDE participants and other faculty in the CVM

- o Develop, implement, and analyze a climate survey
- o Analyze content of and compare original and revised partner department policy manuals regarding promotion and tenure for elimination of any gender bias
- Project Coordinator Wood began preparing for the Year 3 NSF site visit. She scheduled meetings with all ADVANCE partners, made logistical arrangements, and created a financial report. The PIs created a six-page summary report for the site team visit. (Assessment)
- Project Coordinator Wood is currently compiling climate surveys from other ADVANCE institutions. We plan to incorporate questions from these models into a previously used campuswide climate survey and administer the survey in Fall 2006. (Assessment)

Dissemination Activities:

- PIs Montelone and Dyer presented a session at the American Council on Education "Educating All of One Nation" Conference in October 2005; displayed an ADVANCE poster at the National Academies Convocation in December 2005, submitted a chapter for the *Learning from ADVANCE* book, made two oral presentations and displayed a poster at the May 2006 ADVANCE PIs meeting, and made two presentations on the REAP and website redesign initiatives at the WEPAN conference in June 2006. Evaluator Conner made a presentation on using evaluation data at the May 2006 ADVANCE PIs meeting. (Dissemination).
- PIs Dyer and Montelone and OEIE staff member Conner attended the ADVANCE PI Meeting in Arlington, VA in May 2006. Dyer and Montelone presented Working with Department Chairs, Dyer presented on Hiring Practices, specifically showcasing the Recruiting to Expand Applicant Pools (REAP) initiative, Montelone presented on Building Alliances on Campus, and Conner presented on Evaluation, specifically the website revision project. We created and brought an ADVANCE poster summarizing evaluation-proven practices from our campus. (Dissemination)
- Project Coordinator Wood created and distributed an electronic ADVANCE informational
 newsletter to all SEM faculty and staff. The letter highlighted the new K-State work/life website,
 the new IAB Departmental Awards, upcoming professional development opportunities, current
 news articles and tutorials, and other resources on Women in Science, Mathematics, and
 Engineering. She also created an ADVANCE poster that has been displayed for a week at
 approximately half of the SEM department and college offices this year. (Goal 4)
- An ADVANCE recognition ceremony is being planned for Fall 2006. (Goal 4)

Kansas State University ADVANCE Institutional Transformation Project Year Two 4th Quarter and Year Three Findings Report

We report here the findings available to date from our project activities. The activities on which we are reporting may have taken place in the current or previous reporting years; however, the findings were obtained during the current reporting period. We include information on recruiting success of women faculty and administrators, outcomes of the ADVANCE Distinguished Lecture Series, reports from recipients of the Career Advancement Program awards, survey results from our Equity Action Workshop on Faculty Leaves, outcomes of the four College programs, results of our website revision effort, expansion of the Career MAPS initiative, dissemination activities, and the status of plans for institutionalization of components of the project.

Recruitment of SEM Women into Faculty and Administrative Ranks

Our ADVANCE program has illuminated many of the issues facing women faculty in SEM disciplines, and in response, a number of our deans and department heads have become very strong advocates for increasing the representation of women and have provided exceptional leadership in the recruitment, retention, and advancement of women within their units.

We are pleased to report in Project Year Three the following successes in recruiting, promoting, and advancing SEM women:

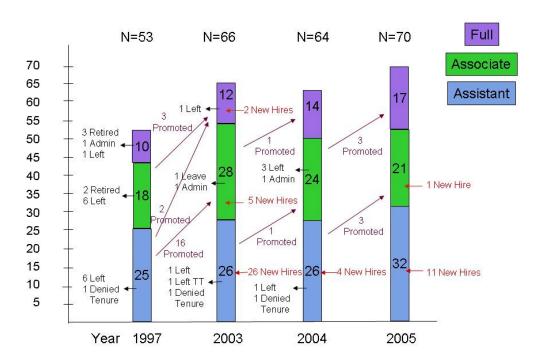
- Twelve women faculty members hired in nine SEM departments in the last year; ten are tenure-track positions and two are clinical track positions
- Two women in non-tenure-track positions had their appointments converted to tenure-track
- One of the tenure-track women faculty members hired has a spouse who was hired into the same department in a tenure-track position
- Four women tenured and promoted to associate professor in four SEM departments. Three of these departments had no tenured women prior to this year
- Two women promoted to full professor in SEM departments. One department had no women full professors at the time of this latest promotion
- One woman hired as the interim department head in an SEM department
- One woman hired as the Associate Dean in the College of Veterinary Medicine
- One woman elected as an Association for Women in Science Fellow

All six of the women who were tenured and promoted have participated in K-State ADVANCE initiatives, including the ADVANCE Distinguished Lecture Series, the Career Advancement Program, Career Enhancement Opportunities, Parallel Paths, Professional Development Program, and Research Enhancement Visits.

Since the beginning of the K-State ADVANCE program the percentage of women in full-time tenure line faculty positions has increased from 13.5% in Fall 2003 to 14.2% in Fall 2005. The percentage of women SEM faculty members who are full professors has increased from 4.7% in Fall 2003 to 7.3% in Fall 2005. The number of women SEM faculty members who are in administrative positions has increased from 6 in Fall 2003 to 11 in Fall 2005.

We have included a faculty flux chart retrospective to our benchmark year of 1997 which tracks the movement of women faculty into and out of our 27 SEM departments. We think it highlights our recent successes at both recruiting and retaining women in SEM departments. This chart is shown at the top of the next page.

Full-Time Tenure-Line Women SEM Faculty 1997-2005



Project-level Activities

ADVANCE Distinguished Lecture Series

We have received a total of forty-two applications to date to host speakers, all of which have been approved. In the first year of the program, there were 23 eligible women faculty members in 15 of the 27 SEM departments. Fourteen women (61%) from ten departments submitted applications. This group consisted of two faculty members of Asian origin, two Hispanics, and the rest White. In the second year of the program, there were 24 eligible women faculty in 12 SEM departments, of whom thirteen (54%) have submitted applications. These applicants represented ten SEM departments; three are Asian, two are Hispanic, and the rest are White.

In the third year of the program, there were 35 eligible women faculty members in 19 SEM departments, of whom 15 (43%) have submitted applications. These applicants represented eleven SEM departments. The awardees included three Hispanic, three Asian and nine White women. Of the year three awardees, nine were women hired into tenure-track positions and thus eligible for the first time; there were twelve such women eligible. We are very excited with this result, which suggests that newly hired women are being encouraged to participate in this program by their department heads, associate deans, deans and female colleagues, some of whom are previous awardees of this program.

During November 2005, we hosted a luncheon and panel presentation for all SEM women faculty eligible for this program. We invited department heads and deans to attend with their eligible faculty members. Four of our previous awardees participated as panel members and shared their experiences with hosting speakers as part of this program. They addressed many of the details involved in arranging the visits and provided advice about choosing a speaker, issuing the invitation, making arrangements for the visit, developing the itinerary, scheduling activities during the visit, and interactions after the visit. Panelists were extremely positive when discussing their experiences

hosting an ADLS speaker and were appreciative of the opportunity the ADVANCE grant had provided to them to host a speaker. Panelists shared what they had learned from the speakers, the benefits from the speaker's visit, and the collaboration that has occurred between themselves and the speakers. Finally, panelists reported that few challenges were encountered as they planned and hosted a speaker. A question and answer period followed the panelists' comments.

The ADLS program has fostered synergistic interactions among the ADVANCE project and other university lecture series. Since the beginning of our project, these interactions have included the following: 1) an ADVANCE Distinguished Lecturer was part of the Provost's Lecture Series; 2) the Provost provided financial support for other university-wide speakers hosted by ADVANCE; 3) the Johnson Center for Basic Cancer Research and the Department of Chemistry have co-hosted with ADLS the presentations by two leading women scientists invited to speak on our campus. The two lecturers co-hosted in the reporting period with other organizations were Dr. Judith Burstyn, co-hosted with the Department of Chemistry, and Dr. Rita Colwell, co-hosted by the Provost. We expect this type of collaboration to expand to other campus lecture series.

We will be seeking financial support from individual donors and corporations to sustain this program in its present form for SEM junior women faculty members beyond the NSF grant period. However, it is our goal to encourage each SEM department to adopt this lecture series model as a part of the culture of the unit in promoting the success of all junior faculty members. We recognize that departmental resources may not be sufficient to allow each junior faculty member to host a seminar speaker each year during the probationary period. Nevertheless, we want to encourage departments to give junior faculty members priority for issuing seminar invitations to guest speakers who could become important members of the junior faculty member's professional network.

Career Advancement Program

Six projects been completed to date, and each awardee has submitted a report on her project. The reports included a short description of activities undertaken and outcomes resulting from these activities. Specific information about the benefits accruing to the awardees from the activities supported by the award and the interaction with the mentors was included.

The activities supported by the awards included giving oral presentations at national and international meetings and at other universities; preparing, submitting and publishing refereed journal articles; submitting proposals and receiving grant funding; traveling to meet with representatives of funding agencies, to perform collaborative research in other countries, and to create a joint distance degree program; hiring technical assistants; and taking short courses to learn current technology.

Some recipients have been recognized by election as a member of an executive board for a professional society, selection as distinguished alumna, and appointment to administrative positions. Three of the awardees were promoted to full professor.

Benefits reported include increased national visibility of awardees, opportunity to work with dynamic leaders, further advancement of research career despite administrative responsibilities, enhancement of technology expertise, assistance in pursuing funding opportunities, revitalization of graduate program, and enhanced national recognition of department.

Interactions with the mentors led to a variety of outcomes, such as better understanding of statistical methods, opportunity to observe woman leaders working effectively with male leaders, organization of a series of visits of awardee with distinguished women scientists, invitations by mentors to speak at conferences or universities, shared strategies for efficiently accomplishing administrative tasks, suggestions for graduate program development, and advice during negotiation of new position.

Seven new awards have recently been made and we will include their outcomes in the next annual report.

Equity Action Workshops

We held an Equity Action Workshop in Fall 2005 to deal with the subject of faculty leave policies. Mr. Gary Leitnaker, Assistant Vice President of the Division of Human Resources at K-State, reviewed the current K-State leave policies. Following this review, the attendees broke out into small groups to discuss case studies that were taken from actual examples of situations encountered in SEM departments at our institution. These situations included personal illness of a faculty member, illness of a family member, and the birth of a child. Each of the groups discussed two cases in terms of 1) the options available to deal with the situation given existing leave policies; 2) strategies to cover the work that needs to be done with regard to the responsibilities of the individual requesting leave; 3) the potential effects on all individuals involved; and 4) ways in which faculty members who take on additional duties can be compensated. Each group reported back on the options and strategies they had developed.

Participants suggested a variety of options and strategies to deal with the leave situations. Many suggestions involved having faculty double up on their responsibilities for a period of time if they expect to be on leave in the future (e.g., after giving birth), finding volunteers to increase their responsibilities temporarily in exchange for additional pay or a reduced workload in the future, and hiring instructors or utilizing graduate students to cover courses.

In general, the workshop participants felt faculty should never need to take leave without pay, and that it is important to seek creative solutions to faculty leave situations. If possible, the university should establish an endowment or raise funds annually so that when emergency leave situations occur, departments do not need to operate in panic mode to keep up with the demands of accommodating teaching and research programs. In addition, individuals should be made aware that they will not be penalized for taking leave following the birth or adoption of a child, so they feel comfortable exploring strategies with their department heads and planning for their leave as early as possible.

Following the meeting, attendees were sent a survey and rated components of the workshop. Participants indicated that they learned about limitations of existing leave policies and had a better understanding of the effects of faculty taking leave as a result of attending the workshop. Workshop participants were asked to respond to open-ended questions about the most and least useful information from the workshop, to provide suggestions for next steps in collecting needed data and developing new processes, practices and policies, and to share other comments. Participants indicated that they gained a better understanding of the need for creative solutions to faculty leave situations and they believe that resources should be identified to facilitate future faculty leaves.

Surveys on Faculty Leave

Following the Faculty Leave Equity Action Workshop, the Project Executive Committee collaborated with OEIE to develop and administer two surveys to learn about the leave experiences of SEM faculty members and department heads. K-State SEM faculty members were sent an online survey that included both scaled and open-ended items regarding experiences with leave policies; SEM department heads were sent a brief electronic mail inquiry regarding their experiences with faculty leave in their capacity as administrators.

527 K-State SEM faculty members were sent an online survey; 199 individuals completed the survey. Approximately half (N=100) of those completing the survey indicated they had not taken leave at the university. Among those who have taken leave, the most common was sabbatical (N=56). Survey respondents indicated their personal level of agreement with 12 statements regarding experiences with taking faculty leave, knowledge of leave policies, and perceived support from colleagues with regard to taking leave when necessary.

Scaled item responses suggest that K-State SEM faculty members feel comfortable with existing faculty leave policies, but they would not feel comfortable taking leave during the tenure track period. In responding to open-ended questions, faculty members most commonly described their experiences with sabbatical leave situations, followed by maternity leave, medical leave, and a variety of other general leave situations. The most frequently cited challenge associated with faculty leave was to cover the responsibilities of the person taking leave. Respondents indicated that temporary instructors were hired or responsibilities were reassigned to other faculty within a department to cover the responsibilities of faculty members on leave. These strategies are perceived as resulting in positive consequences for the person taking leave, but in negative consequences for other faculty in the department. Survey respondents identified what they would consider to be ideal accommodations for leave situations they could encounter as a faculty member. The most commonly identified accommodation was to ensure that the faculty member's responsibilities, especially teaching, were covered.

Seventeen of 27 SEM department heads completed the department head leave survey. The inquiry included three questions. First, department heads were asked to indicate the number of people in their units who took various types of leave during the three previous academic years. They then responded to open-ended questions regarding the resources they used to cover the duties of faculty on leave and the types of resources that would be helpful in facilitating future faculty leave situations. The responding department heads indicated that a total of 29 individuals in their departments had taken some type of leave between 2002 and 2005; and the majority (19) of these was for sabbatical leave. Consistent with responses provided by SEM faculty on the online survey, department heads noted that they have most commonly asked other departmental faculty to cover the responsibilities of individuals on leave, and they have hired instructors and graduate students to teach courses. The resource that would be most helpful for facilitating future faculty leave situations is additional funding to hire instructors and to compensate faculty or graduate students for their increased workload.

We hope to use the results of the Faculty Leave Workshop and the Faculty Leave Surveys to inform a conversation with the Provost and the Vice President for Administration and Finance to determine possible options at the institutional level to finance, support, and accommodate faculty leave issues.

College-level Activities

College of Agriculture

The Professional Development Program (PDP) offers small competitive awards to tenured and tenure-track women faculty members to enhance their scholarly and instructional activities.

This program has had the following outcomes reported by the participants:

- 15 women (1 University Distinguished Professor, 4 Full Professors, 7 Associate Professors, and 3 Assistant Professors) from all six departments with eligible women participated in the first two years of the project. 21 total awards have been made.
- Awards have supported domestic and international conference attendance, workshop participation, sabbatical leave, and visits to other universities.
- Participants reported benefits such as making new contacts in a research area, developing grant proposals with new colleagues; enhancing an existing research area; learning about educational innovations at other universities; and implementing new leadership skills.
- Two recipients have had extramural grants funded that were initiated with PDP support.

College of Arts & Sciences

The Career Enhancement Opportunities (CEO) initiative provides competitive funding for tenure-track women faculty members to enhance their scholarly activities.

The CEO initiative has had the following outcomes reported by the participants:

- 14 women (all Assistant Professors) from all seven departments with eligible women participated in the first two years of the project. 23 total awards have been made.
- Awards have provided funds for domestic and international conference attendance, workshop participation, research support, and visits to other universities.
- Participants have reported benefits such as establishing important professional relationships; obtaining feedback on current research projects and exploring ideas for future research projects; increasing visibility for their research; identifying possible areas of collaboration; learning a research new technique; jump-starting a new line of research; meeting program officers from funding agencies which resulted in successful grant proposals and panel service.

College of Engineering

The Research Enhancement Visits (REV) initiative for tenured and tenure-track women faculty members to enhance their scholarly activities has had the following outcomes reported by the participants:

- 6 women (1 Associate Professor, 4 Assistant Professors, and 1 Instructor) from four of seven departments with eligible women participated in the first three years of the project. Sixteen total awards have been made.
- Awards have supported domestic and international conference attendance, workshop participation, and visits to other universities, research centers and federal agencies.
- Participants reported benefits such as making contacts for future research collaborations; providing visibility within their research disciplines, receiving review of research from member of National Academy of Engineering who encouraged submission of research to journal he edits; and meeting program directors of federal funding agencies to discuss research proposals.
- Increases opportunities for research at major facilities.

College of Veterinary Medicine Parallel Paths Program

All CVM faculty (tenured, tenure-track, and term) are eligible to participate in Parallel Paths. The Parallel Paths initiative involves groups of CVM faculty known as Prides. It is intended to foster the development of junior faculty, sustain the productivity of senior faculty, and create an environment that helps them be successful in their teaching, research, clinical, and service roles. The first Pride groups consisted of three senior faculty facilitators and between four and seven junior faculty members, but the number of junior faculty members in each pride has increased so that now there are eight to twelve in each group. These groups meet monthly to focus on achieving success on paths that are parallel but specific for each faculty member. A total of 26 faculty members, 11 women and 15 men, are participating in the program.

OEIE has been evaluating this initiative since the formation of the Prides. As a continuation of their evaluation, OEIE conducted a focus group in Project Year Three with members of the Purrfect Pride. Following are the questions used and a summary of the responses.

• Question 1: Why did you choose to participate in Parallel Paths?

Many Purrfect Pride participants indicated that they chose to participate in Parallel Paths in order to interact with other faculty members from across the CVM in a relaxed environment. Two group members reported that they joined a Pride so they could talk about faculty-related issues. One member indicated that he or she was asked to join, while another indicated that he or she joined out of a professional obligation to help younger faculty members. Two respondents stated that the funding to attend professional meetings was an attraction to join Parallel Paths.

• Question 2: Have you found the monthly meetings helpful to your development as a faculty member in your department?

Many participants described the benefits of interpersonal relationships they have developed in the Pride. Due to the nature of these relationships, members indicated the meetings are open forums for discussion, help them understand the college expectations for promotion and tenure, and facilitate the meetings as being a "sounding board" for junior faculty.

• Question 3: Have you found the monthly meetings helpful to your research/scholarship productivity in your department?

Pride members reported a variety of ways in which the meetings have been helpful in terms of professional development. One facilitator reported that he or she learned another group member needed laboratory space for research, and this facilitator had extra research space available for the member to use. Two members indicated they had been provided with guidance on ways to map out and progress on their career and research agenda. Some group members felt there had not been any direct benefit to their research/scholarship productivity, but they had become more aware of possible research collaboration opportunities from group discussions.

• Question 4: What are your thoughts/opinions about the topics that have been discussed at the monthly meetings?

Purrfect Pride members indicated the topics they wanted to discuss have been addressed at meetings, and that they felt comfortable suggesting discussion topics. Junior faculty seemed comfortable addressing any topic during group meetings and the group was a safe place to talk.

• Question 5: How can participation in Parallel Paths improve work environment satisfaction?

Members of Purrfect Pride felt there were several improvements in their work environment resulting from participating in Parallel Paths. These improvements included collaboration, being comfortable and making connections with people in the college, being able to discuss ideas with colleagues, and having a senior faculty member as an advocate to help deal with problems that may arise.

• Question 6: Have you previously participated in a group-mentoring program?

Several of the Purrfect Pride group members had been involved in previous group-based mentoring programs, although they indicated that the Parallel Paths mentoring experience was more sustained, enjoyable, and less formal and serious than were other programs.

• Question 7: What challenges, if any, did you expect to encounter as a participant in Parallel Paths? How have these been handled?

For the most part, participants described challenges that were more related to individual issues, such as scheduling and organization, than to participating in a group. For example, one person noted that it was a challenge to schedule an evening to meet. Another individual reported that it was necessary to organize his or her thoughts before attending the meetings to better remember what to ask or discuss at the meetings. Another participant noted that group participation encouraged him or her to engage in mentoring activities.

Professional Development Seminar Series

The Parallel Paths program initiated a professional development seminar series featuring speakers from the CVM, other universities, and national funding agencies. Six events were held during the reporting period and included presentations on grantsmanship, improved teaching methods, diagnostic learning strategies using case studies, and time management. Attendance included faculty members from the entire College of Veterinary Medicine as well as from other SEM colleges.

Department-level Activities

Partner Department Head interactions

Since the start of the project, we have had three new partner department heads appointed. This has resulted in slowed implementation of departmental initiatives in some of the partner departments. However, the three new appointees have enthusiastically embraced participation in the project and are strategically engaging their faculty in the ADVANCE initiatives at not only the department level, but at the college and project level as well. Some partner department heads are actively leveraging ADVANCE initiatives to carry out transformation of their departments. One example is the Department of Chemical Engineering, which has taken full advantage of almost every eligible ADVANCE initiative to modernize and position the department to become a leader in the discipline as well as a model for inclusiveness among SEM departments at K-State. For instance, they utilized the opportunity of the website revision process to completely overhaul and enhance the department website and expansively used the REAP initiative to hire additional women faculty members. Another example is the Division of Biology, which is using its ADVANCE funding to further an initiative to reduce the teaching loads of junior faculty members to provide them with more time to devote to achieving competitive funding.

All of the partner departments have hired or promoted and tenured women faculty since the start of the project. There have been nine women faculty hires in the six departments; this includes two positions that were converted from non-tenure-track to tenure-track. In addition, five women faculty member have been promoted in these six departments.

Career MAPS

The Department of Clinical Sciences and the Department of Electrical and Computer Engineering applied for and received funding from the Internal Advisory Board funding initiative to implement Career MAPS in their departments. We will be following the progress of these two departments as they work with their junior faculty members on this initiative. The extension of this initiative beyond the original six partner departments will be important in its institutionalization.

Website Revision Initiative

In response to the first workshop on website design led by Dr. Burack in March 2004, our partner departments began making revisions to their department websites. In Fall 2004 Dr. Burack returned to K-State and provided a repeat offering of the workshop on website design for a broader audience. She also met with representatives from each of our partner departments to review and discuss their progress on revisions. Once the revisions were complete and submitted to Dr. Burack for her review, she prepared complete evaluations for all six partner department websites. Her evaluation was based on a rubric that she developed, and her analysis was presented in a final report to each department.

Dr. Burack's rubric included eight categories: Using Color and Font, Using Language, Using Photographic Images, Including Diversity-Friendly Links, Committing to Diversity, Eliminating References to Discriminatory Traditions and Practices, Using Science and Technology in the Real World, and Characterizing Female and Male Students and Professionals. A numerical score was assigned for each of these categories using a 5-point Likert scale: 5=Excellent; 4=Very good; 3=Good; 2=Fair; 1=Poor. The final, overall score reflects a cumulative total of points for the eight categories of the rubric. The six partner departments were awarded scores that ranged from 24 to 35 out of 40 possible points. A discursive evaluation was provided for each department that contained more detailed feedback and suggested additional enhancements that could be made.

To obtain additional input on the effectiveness of the website revision, the K-State ADVANCE Project team convened focus groups of graduate students and junior faculty members. These individuals were asked to evaluate both the original and revised websites and provide us with their perspectives and comparison of the two versions. These groups were selected because it was

assumed that the newly hired faculty members would have used websites in their recent job searches and that the graduate students would soon be doing so. The focus groups were conducted by the K-State Office of Educational Innovation and Evaluation.

The faculty members who participated in the focus groups had been at the university less than two years, and the graduate students who participated were doctoral students. There were two groups of faculty members from non-partner SEM departments; one focus group had five female faculty members and the other had three male faculty members. The two groups of doctoral students also were from non-partner SEM departments; one focus group had four women and the other group had two men. The focus group participants were asked to review, prior to the session, the six revised departmental websites and three of the original archived websites. Three of the departments had conducted an ongoing revision and did not retain copies of their original pages. The focus group members evaluated each of the nine websites on (1) how welcoming the site was; (2) the ease of navigation of the site; and (3) their overall impression of the site. These evaluations were discussed among the participants during the focus group meetings. For the three departments for which both the original and revised websites were available for review, participants were asked to specify which version they preferred. The focus group members were not informed as to which version of the website was the original. The mean ratings from the focus groups and a summary of the discussion of these groups were provided to the K-State ADVANCE Project team by the evaluators.

Male and female faculty members found websites welcoming if they included the following characteristics: quality pictures, accurate and up-to-date information, links to other helpful websites, current news and events, and bulleted, easy-to-find links. Women faculty members mentioned that a site was perceived as welcoming if it included images of diverse individuals and women in prominent or active roles.

Male and female doctoral students identified the following characteristics as making a website welcoming: good graphic and design layout, drop-down menus from top tabs, easily located information, modest amounts of text, and photographs that included graduate students interacting with faculty members in classrooms and laboratories. Doctoral students and faculty members consistently identified the same websites as being the most welcoming. No differences emerged when male responses were compared with female responses as to which websites were the most welcoming.

Factors reported by both faculty members and doctoral students as contributing to ease of navigation of websites included bulleted links; convenient access to departmental information such as faculty forms and promotion and tenure materials; tabs from the home page remaining on subpages; and ease of returning to the department's homepage from subpages.

Websites were also rated on overall impressiveness. Faculty members identified the following aspects as contributing to their judgment of a website as impressive: ease of navigation; detailed and clear tab structures; minimal clutter, i.e., not too much text; content that was clear, complete, and up to date; inclusion of faculty credentials; and visual appeal. Doctoral students noted that impressive websites were well-organized and functional, i.e., no broken links; included attractive images; were simple and not overly cluttered; and advertised the department well.

Focus group members also identified aspects of the websites that they did not like. Factors reported as negative by male faculty participants were small font sizes, absence of faculty publication information, excessive white space on a page, slow loading, and difficult navigation. Female faculty participants did not like links positioned on the right side of the screen, specific background colors, pages too crowded with text, the lack of a link back to the home page from subpages, and the absence of information on current activities in the department. Both faculty members and doctoral students did not like unorganized sites, information that was in a location that did not 'make sense', and sites

that contained images that did not load or information that was outdated. Participants disliked websites that contained either too much information or too little information.

Focus group members were asked to identify improvements to the websites that would make them more welcoming to new women faculty members and graduate students. Male faculty participants suggested including pictures of diverse individuals, particularly of women in roles of authority and in traditionally male fields such as agriculture. They also felt that statements acknowledging diversity as central to the department were important. They mentioned that such statements could be in a quote from the department head or in a more general statement, such as including the phrase "equal opportunity employer" on all pages. Similarly, female faculty participants noted that having an image of a woman in a position of authority, as is the case for two of the partner departments who have images of their female department heads on their homepages, is very appealing. Alternatives that were suggested for departments that did not have female department heads included highlighting women faculty members in the department, for example in a section on new faculty; reporting activities of department and college leaders in promoting women in SEM disciplines; and incorporating a link to the K-State ADVANCE website.

Both male and female doctoral students noted that if too much attention were drawn to issues of gender on a department's website, the result might be an undesirable emphasis on the small numbers of women faculty members or graduate students in that department or that the website might not appear welcoming to both genders. However, they also noted the importance of including statements indicating support for diversity, including links to resources helpful for all graduate students, and including links to diversity- and gender-specific program sites.

Two general themes emerged from the focus group discussions. (1) Faculty participants, particularly women, observed that the websites of their own departments were outdated and in need of upgrading to improve their welcoming quality and ease of navigation. This was mentioned as a critical factor for recruitment of graduate students and faculty members and for presenting a strong image for the department. They recognized the need for the department to assign responsibility to someone for managing the website. Doctoral students, in particular, noted that websites have become an important tool for learning about academic programs at universities. (2) Some faculty participants spoke of the importance of all faculty members having high-quality individual websites showcasing current research and listing publications. Doctoral students also identified this as an important issue for student recruitment, but noted that it is important for these pages to be organized and accessed in a logical manner from the department homepage.

The aspects of the websites identified by the focus groups as making them welcoming and easy to navigate strongly paralleled the criteria used by Burack in her evaluation rubric. Five of the eight criteria contained within the rubric (color and font, images of women, diversity-friendly links, affirmative committment to diversity, characterizing female and male students or professionals in similar terms—in this case, showing women as leaders) were specifically volunteered by focus group participants in their discussions. Particularly compelling were (1) the comments regarding the significance of sites containing images of women, especially in leadership roles, and (2) the recommendation to incorporate statements of commitment to diversity and links to sites promoting inclusion, diversity and advancement of women. This underscores the importance of these criteria in the rubric.

One of the outcomes associated with this process has been the recognition that significant improvements can be made with relatively low investment. It is certainly true that one could spend a large amount of money on such revisions, but the experience of departments at K-State has been that the cost associated with hiring a professional web designer to create a completely new site has entailed less than \$5,000. This may be a reflection of the community in which K-State is located as well as the availability of individuals with this type of expertise. This low cost makes it possible for

almost any department to professionally enhance its website. Another cost that must be considered is the time and effort required to continually update the website. One of the comments made frequently in the focus groups referred to the need for websites to have current and accurate content.

The outcomes from the focus groups conducted with non-partner department faculty members suggest that they may initiate or participate in website revisions in their home departments. Thus the assessment process may be instrumental in catalyzing additional institutional transformation. In addition, the ADVANCE Project leadership team will ensure that the website initiative is expanded to the university's entire web presence. The four colleges have recently completed major revisions, informed by Burack's rubric, of their websites, and a new university homepage was recently launched. As increasing attention is paid to the images conveyed by websites, it is anticipated that all units will ensure that their websites project a welcoming and inclusive message.

Internal Advisory Board

Two meetings were held in project year three; one on October 11, 2005 and another on April 17, 2006. A first call for proposals for funded participation by IAB departments was issued in Fall 2005, and six proposals were selected for funding. Each proposal required the selection of a partner department as a mentor. We found that the ADVANCE Leadership team needed to provide significant feedback on about half of the proposals in order to help departments craft initiatives that were well-aligned with the goals of the ADVANCE project. Most of the proposals that needed assistance were focused on activities directed primarily at women students, rather than women faculty members. After several iterations, we were able to agree on activities that included women students, but had a central focus on recruitment, retention, and advancement of women faculty members.

As with the partner department heads, there have been nine new appointments of IAB department heads since the start of the project. Five of these new appointees have been in the College of Agriculture, which has also appointed a new dean since the start of the project. We believe that this has led to slow engagement in some departments as the new department heads have become acquainted with the ADVANCE project. On the positive side, several of these new department heads have been proactive in voicing and showing their support for the project. For example, they have requested information about project initiatives from our Project Coordinator, they are finding innovative ways to support women faculty members in their departments, and one of the departments requested that one of the female PIs visit with women faculty candidates during the on-campus interview for a search conducted this year.

Since the start of the project, 13 of the 21 IAB departments have hired women into tenure-track positions. There have been 16 new hires into the tenure track, one conversion from non-tenure-track to tenure-track, and two hires into the newly created clinical track.

We have observed that some department heads are more proactive than others in communicating the various opportunities to participate in ADVANCE initiatives to the eligible women faculty members in their departments. This results in uneven participation among faculty from the various SEM departments. We are addressing this by events such as the annual ADLS luncheon that began in Fall 2005, and the planned Fall 2006 ADVANCE Recognition Ceremony and Reception.

Institutionalization

The K-State ADVANCE Project has begun to expand its efforts to the other SEM departments at K-State beyond the original six partner departments. These efforts include 1) the IAB Department Initiatives; 2) the traveling display on the ADVANCE Project that is hosted by each SEM department; and 3) sharing information about ADVANCE programs with non-SEM departments. The success of the various ADVANCE initiatives has led to the commitment by each of the four SEM deans to continue either the college-level programs or some aspect of the project-level initiatives.

- The College of Agriculture has committed to continuing its professional development program.
- The Colleges of Arts & Sciences and of Engineering are pursuing development efforts to continue support for the ADLS program.
- The College of Engineering has committed to continuing the REV and REAP programs. The College also has established a hiring incentive that provides 30% of the salary for any woman or minority faculty member hired, for as long as that individual remains at K-State.
- The College of Veterinary Medicine has committed to continuing the Parallel Paths program.

Anecdotal evidence for institutional transformation

Partner department heads and IAB department heads have provided written feedback to the project team leaders about the aspects of the project that have been the most beneficial and the positive outcomes that they have observed as a result of their participation. These include the following:

- Assistance with website revision
- Information provided at the equity action workshops
- Involvement of faculty in the transformation process created a sense of ownership in the initiatives
- Opportunity to update department documents and policies
- Interaction with other departments useful for exchange of ideas.
- Heightened awareness of gender-related issues
- Increased sensitivity to situations that otherwise might have gone unnoticed
- Increased morale among individuals who might have felt overlooked in the past
- Recognition of importance of inclusiveness and retention issues
- Support for active recruiting and hiring of new faculty members

One of our partner department heads has noted that "In general, I would characterize the activities of the ADVANCE project team as supportive and creative, and most importantly, positive, in working with units on initiatives." Another partner department head stated "I've really appreciated the training and support that I've gained through my involvement in the ADVANCE project. I'm more keenly aware of the range of issues that new and continuing faculty face. I believe this understanding has enabled me to be a more effective departmental leader and to assist the departmental faculty in creating an environment in which all faculty members and students can be successful."

Another department head, who has served for one year, commented, "Without question, joining the ADVANCE Advisory Board and attending meetings has elevated my awareness of issues on campus (and off) concerning perceptions, practices, biases, and differences relative to gender issues and minorities in general. In particular, my participation—limited, to date, as I just recently began—has revealed statistics about under-representation that I had not been aware of, and, perhaps more importantly, some of the subtle ways in which we operate as individuals and collectively in groups that may create an unequal 'playing field' in the work environment. Lastly, it is very beneficial to be aware of the programs and other activities administered through ADVANCE that help make progress towards alleviating some of the past and current problems."

Our four SEM deans have commented on the elevated level of awareness and conversation about gender issues in departments in their colleges and believe this has led to an increase in the number of women faculty members hired into the tenure-track, promoted, and appointed to administrative positions. They have noted that success in one department "spills over" into other units, and that the presence of women in administrative meetings has changed the tenor of the discussions that occur.