



**NSF ADVANCE
INSTITUTIONAL TRANSFORMATION
FOR FACULTY DIVERSITY**

**Year End Report
September 1, 2005 through August 31, 2006**

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I. PARTICIPANTS

A. PROJECT PARTICIPANTS

Evelyn Posey: Principal Investigator

Has worked for more than 160 hours: Yes

Contribution to project: Evelyn Posey is responsible for providing the leadership, education, incentives, and plans to ensure successful implementation of this initiative. The ADVANCE Coordinator and Evaluator report directly to her. Dr. Posey chairs the internal Institutional Action Board and the external Advisory Board. Dr. Posey's support, 25% of her 100% salary for 12 months, comes from the university cost-sharing portion of the grant.

Elizabeth Anthony: Co-Principal Investigator

Has worked for more than 160 hours: Yes

Contribution to project: Elizabeth Anthony leads the Policy and Recruitment component. Her responsibilities include developing work-life policies, supporting recruitment efforts by interacting closely with search committees and the EO/AA officer, and providing research support to female faculty and/or faculty involved in gender research via open competition Graduate Research Assistantships (GRA). Dr. Anthony's support, 33.3% of her salary 4.5 months, comes from the university cost sharing portion of the grant, and two summer months salary from the "Salaries and Wages" portion of the NSF grant budget.

Christine Reimers : Co-Principal Investigator

Has worked for more than 160 hours : Yes

Contribution to project: Christine Reimers leads the Faculty Development component designed to increase retention and promotion of a diverse, highly qualified faculty by acculturating new faculty into the academe and working with them closely as they prepare themselves for career success. Dr. Reimer's support, 1.5 summer month's salary, comes from the university cost-sharing portion of the grant.

Patricia Witherspoon: Co-Principal Investigator

Has worked for more than 160 hours: Yes

Contribution to project: Patricia Witherspoon co-led the Collaborative Leadership component with Ann Gates. As of March 2005, she leads this effort. The overarching objective of the Collaborative Leadership component is to facilitate the creation and sustenance of a culture and climate conducive to recruiting, retaining, and promoting a diverse faculty at UTEP. Dr. Witherspoon's support, 10% of her 100% salary for 12 months, comes from the university cost-sharing portion of the grant.

Ann Gates: Co-Principal Investigator

Has worked for more than 160 hours: Yes

Contribution to project: Until March 2005, Ann Gates co-led the Collaborative Leadership component with Patricia Witherspoon. The objectives of the Collaborative Leadership component are described above (see Patricia Witherspoon). Dr. Gate's support, 33.3% of her salary for 4.5 months, came from the university cost sharing portion of the grant, and 1 summer month salary from the "Salaries and Wages" portion of the NSF grant budget.

Igor Ryabov: Senior Personnel

Has worked for more than 160 hours: Yes

Contribution to project: Igor Ryabov worked to develop a strategy for consistent data collection methodologies for future grant years. He is responsible for working with the investigators to implement an evaluation component for each of the substantive grant activities and to diagnose areas for revision, assist in the identification of “best practices” associated with each component, and to document institutional changes attributable to the grant's initiatives. Dr. Ryabov's support, 100% of his salary for 12 months, comes from the “Salaries and Wages” portion of the NSF grant budget.

Ann Darnell: Senior Personnel

Has worked for more than 160 hours: Yes

Contribution to project: Ann Darnell assumed responsibility for data collection and analysis corresponding to the NSF 12 Quantitative Indicators of Activity and Progress in February 2006. Ms. Darnell's support, 20% of her salary for 12 months, comes from the “Salaries and Wages” portion of the NSF grant budget.

Jana Renner: Senior Personnel

Has worked for more than 160 hours: Yes

Contribution to project: Jana Renner works closely with the investigators to create, implement, and document the grant activities. She facilitates communication between the investigators and department chairs and faculty to inform them of grant progress and opportunities provided by the grant. She is responsible for the daily operations and management of the ADVANCE office. Ms. Renner's support, 100% of her salary for 12 months, comes from the “Salaries and Wages” portion of the NSF grant budget.

Celia DeSantiago: Administrative Assistant

Has worked for more than 160 hours : Yes

Contribution to project : Celia DeSantiago provides administrative support to the program Coordinator and program evaluator, including entering data, arranging travel, processing purchase requisitions, managing records, and maintaining the financial records database. Ms. DeSantiago's support, 100% of her salary for 12 months, comes from the “Salaries and Wages” portion of the NSF grant budget.

Shashank Birudavolu : Graduate Student

Has worked for more than 160 hours : Yes

Contribution to project: Shashank Birudavolu, Department of Electrical and Computer Engineering, assists Ms. Darnell with NSF 12 data collection. Mr. Birudavolu's support, 100% of his half-time salary for 12 months, comes from the “Salaries and Wages” portion of the NSF grant budget.

Nichole Elias : Undergraduate Student

Has worked for more than 160 hours : Yes

Contribution to project : Nichole Elias, Department of Political Science, served as the student assistant for the Faculty Mentoring Program for Women and the IMPACT Seminar. Ms. Elias' support, 100% of her half-time salary for four months, came from the “Salaries and Wages” portion of the NSF grant budget.

Noel Elias: Undergraduate Student

Has worked for more than 160 hours: Yes

Contribution to project: Noel Elias, Department of Nursing, assists with general office duties including data entry and event organization and management. Ms. Elias' support, 100% of her half-time salary for nine months, comes from the "Salaries and Wages" portion of the NSF grant budget.

Karla Ramirez: Undergraduate Student

Has worked for more than 160 hours: Yes

Contribution to project: Karla Ramirez, Department of Information and Decision Sciences, serves as the student assistant for the Faculty Mentoring Program for Women and the IMPACT Seminar. Ms. Ramirez' support, 100% of her half-time salary for five months, comes from the "Salaries and Wages" portion of the NSF grant budget.

A. PARTNER ORGANIZATIONS

New Mexico State University: Financial Support; Collaborative Research

UTEP and NMSU work together on dual career couple recruitment and collaborated (including sharing financial responsibility) on the production of a brochure to promote this initiative. Former Co-PI Dr. Gates is also part of a NMSU grant proposal "Effective Strategies to Diversify Academic STEM."

University of Michigan: Financial Support; Collaborative Research

PI Evelyn Posey, Co-PI Tine Reimers, and former Coordinator, Kelly Andronicos, authored a chapter entitled "A Faculty Mentoring Program for Women: Building Collective Responsibility for Developing a Highly Qualified Faculty" for the book *Advancing Women in Science and Engineering: Lessons for Institutional Transformation* to be published by the Michigan Press.

Case Western Reserve University; Collaborative Research

PI Evelyn Posey and Co-PIs Tine Reimers and Libby Anthony were interviewed by the Case Western Reserve PI for their study on leadership development at NSF ADVANCE institutions. The results of this study were disseminated at the 2006 ADVANCE PI Meeting.

Texas Tech University; Collaborative Research

PI Evelyn Posey provided information and assistance for Texas Tech's NSF PAID proposal. Co-PI Tine Reimers provided Texas Tech faculty with information about conducting an IMPACT seminar on their campus.

B. OTHER COLLABORATORS

1. Advisory Board Members

The Advisory Board is responsible for continuous refinement of the UTEP NSF ADVANCE initiative, provides innovative ideas, monitors progress, and at the conclusion of the grant, will assess the success of our initiative. The seven members of the board are representative academic, business, and scientific leaders who are recognized nationally for their work in organizational

transformation and commitment to diversity. We conducted our third Advisory Board meeting April 5-7, 2006.

The Advisory Board members:

- Committee Chair - Karan Watson, PhD, PE, Dean of Faculties and Associate Provost, Texas A&M University
- Myrna Deckert, Chief Operating Officer, Paso del Norte Group
- Lisa Frehill, PhD, Associate Professor, Department of Sociology and Anthropology, New Mexico State University
- Frances Kendall, PhD, Consultant
- Emir José Macari, PhD, Dean, College of Engineering, University of Texas at Brownsville
- James Murphy, Consultant
- Orlando Taylor, PhD, Vice Provost for Research and Dean of the Graduate School, Howard University

2. Institutional Action Board

The Action Board is responsible for continuous refinement of the initiative through initiating policy change, defining strategies for change, guiding future grant initiatives, and developing a plan for sustainability. In addition to the grant investigators and program evaluator, the board is comprised of the Deans of Business, Engineering, Liberal Arts, and Science; the campus EO/AA officer; chairs of selected ADVANCE departments, and other faculty leaders.

UTEP ADVANCE conducted its spring meeting January 11, 2006. In lieu of meeting with the entire board, the ADVANCE team met with the following members to restructure the work of the Action Board:

- Barry Benedict, Dean, College of Engineering
- Howard Daudistel, Dean, College of Liberal Arts
- Michael Eastman, Dean, College of Science
- Robert Nachtmann, Dean, College of Business
- Sandra Hurley, Associate Vice Provost
- Richard Jarvis, Provost

3. Women's Advisory Committee and Diversity Committee

ADVANCE met and collaborated with the Women's Advisory Committee and the Diversity Committee, both of which report to the President, to refine a plan for a UTEP Diversity Officer.

4. Subcommittees

The following faculty served on the Graduate Research Assistant Awards Proposal Review Committee.

- Elizabeth Anthony, Co-PI, Geology
- John Hadjimarcou, Chair, Marketing and Management
- Cheryl Howard, Associate Professor, Sociology and Anthropology
- Elizabeth Walsh, Associate Professor, Biology
- Ryan Wicker, Associate Dean, College of Engineering

4. Other Specific People Not Listed:

Keith Cardon, Department of Geological Sciences, assists Elizabeth Anthony, Professor of Geological Sciences and Co-PI, with research.

Edith Elizalde, Department of Computer Science, assisted Ann Gates, Professor of Computer Science and Co-PI, with research.

Vanessa Espejel-Garcia, Department of Geological Sciences, assists Elizabeth Anthony with research.

Carlos Ferregut, Division Director of Civil, Industrial, Mechanical, and Metallurgical Engineering, represents the College of Engineering as an ADVANCE Faculty Fellow. Dr. Ferregut assists the ADVANCE team with recruiting and mentoring within the College of Engineering and attends every other ADVANCE team meeting.

Leslie Foster and Rebeca Guerrero, Department of Biological Sciences, assists Elizabeth Walsh, Associate Professor of Biological Sciences, with research.

John Hadjimarcou, Chair of Marketing and Management, represents the College of Business as an ADVANCE Faculty Fellow. Dr. Hadjimarcou assists the ADVANCE team with recruiting and mentoring within the College of Engineering and attends every other ADVANCE team meeting.

Sandra Hurley, Associate Vice Provost, and Elizabeth Flores, Associate Provost for Resource Management, provided data and assistance for the development of a longitudinal database for the NSF 12 indicators. Dr. Hurley also attends every other PI meeting to discuss and plan for institutionalization of ADVANCE efforts.

Roy Mathew, Director and Cathe Lester, Associate Director of the Center for Institutional Evaluation, Research and Planning, facilitated the acquisition of data used in this report.

Michael Merritt, Department of English, assists with Web site design and maintenance.

Jeannette Monsivais, Department of Communication, assists Pat Witherspoon, Professor of Communication and Co-PI, with research related to the ADVANCE grant.

Deirdre Rommelmeyer, Director of the Equal Opportunity/ Affirmative Action Office, provides Elizabeth Anthony with faculty recruiting information and data.

II. ACTIVITIES AND FINDINGS

A. RESEARCH AND EDUCATION ACTIVITIES

During Year 3 of the University of Texas at El Paso (UTEP) NSF ADVANCE Institutional Transformation for Faculty Diversity initiative, we have made significant strides in the recruitment, retention, and advancement of women and minorities in academic science and engineering disciplines. With the work of our first two years coming to fruition, this has been our most successful year yet. To summarize some of our significant accomplishments:

- Since the fall of 2003, 41% of hires in ADVANCE departments have been women.

- As of fall of 2005, 43.7% of the 900 university full and part-time faculty are female and 26.8% of the ADVANCE department faculty are female.
- The number of female tenure-track and tenured faculty in the ADVANCE departments has increased from 38 in fall 2003 to 49 in fall 2005.
- Since fall 2003, all women who have come up for tenure and/or promotion in the 18 ADVANCE departments have been successful.
- 32 active mentees and over 100 faculty have participated in the highly successful Faculty Mentoring Program for Women.
- 30 faculty, men and women of all ranks, have developed integrated plans for career success through participation in the IMPACT Seminar.
- Third year review processes are now in place in three colleges and under development in the fourth.
- Chair Chats, Chair Interviews, Women Faculty Forums, and the administration of a faculty work-life survey have opened lines of communication within and across departments.

We recognize that in spite of these grass-roots efforts, this type of institutional change is seldom sustainable unless top administration is involved in the effort. In the fall of 2005, we invited Associate Vice Provost Sandra Hurley to attend our PI meetings and in summer 2006, she was named Associate Vice Provost for Faculty Development, a position that will ensure her continued work to sustain many of the ADVANCE initiatives. As a result of this strengthened partnership with the Provost's Office:

- Policies for extending the tenure clock are now included in the UTEP Handbook of Operating Procedures.
- The UTEP Human Resources department now administers a faculty exit survey.
- A Human Resources staff member now meets with candidates who have spouses or partners who need help finding jobs in the region.
- Policies for hiring dual career academic couples are in development.
- Plans are underway to create a Chairs' Council, a forum for department chairs to discuss concerns and share best practices.

Following is a description of Year 3 Research and Education activities by ADVANCE component:

1. Policy and Recruitment

Policy and Recruitment continues its focus in two areas: 1) the continuation of the highly successful Graduate Research Assistantship (GRA) program and (2) the continued efforts in faculty recruitment.

The GRA Program

The GRA program is a merit-based award to female faculty and their graduate student mentees, both male and female. The program solicits applications in the fall of each year for student support in the spring and summer semesters. A panel of faculty from each of the Colleges ranks the applications for scientific merit and the impact that funding will have on the faculty and student awardees. In fall of 2005, 24 applications were received and 14 were funded, for a total amount of \$60,812. The list of funded applications is included in Appendix A. Faculty who received these awards repeatedly emphasize the importance of this program for both developing collegiality in their research and also for productivity in grantsmanship and publications.

Female Faculty Recruitment

The second focus of Policy and Recruitment continues to be an active role in the faculty recruitment process. This role includes Co-PI Libby Anthony meeting with Ms. Deirdre Rommelmeyer, UTEP EO/AA officer, to track all open lines in the ADVANCE departments. Ms. Rommelmeyer and the ADVANCE office also identify female candidates in these searches. Essentially all of the female candidates who visit UTEP meet with a member of the ADVANCE team, and we then track the search after their visit. Funds are available through the grant to facilitate dual career placement, which has proved to be a critical aspect in female hiring. (See Appendix B for a listing of the faculty candidate interviews).

We have collected data on the number and percent of females in interview pools for the three years of the grant, which provides information on which departments and colleges are most active in recruitment of females. A summary of our findings was presented at the annual ADVANCE PI meeting in May 2006. One of our principal conclusions is that if 33% of the campus interview pool is female, there is a 57% chance that the first offer will be made to a female. Clearly, this statistic, if borne out in additional years and by other institutions, has direct impact on the goals of the ADVANCE program to increase the recruitment of females to science and engineering disciplines. Additional highlights of our analysis are presented in the following sections of this annual report.

2. Faculty Development

Faculty Development continues its focus in two areas: 1) the Faculty Mentoring Program for Women (FMPW) and 2) the IMPACT Seminar.

The Faculty Mentoring Program for Women (FMPW)

The FMPW, which now includes 32 active mentees, invites all new tenure-track women faculty to participate in the program. New this year was a group mentoring model, including informal monthly group luncheons where the entire mentoring group assembled to discuss matters of interest. Ideally, the mentee team consisted of four to five new women faculty from the same college and even from the same department. In some cases, mentees were grouped across colleges when the disciplines were similar. These mentee groups were then matched with two mentors who were from the respective college(s) but not from any of the departments represented within the group. In addition, monthly brown bag lunches provided an efficient venue to deliver information on topics such as how to negotiate the challenges of maternity and progress toward tenure, definitions of leadership, and development of teaching portfolios. September and October were reserved for formal sessions on essential program information. Even though this team mentoring approach was new this past academic year, the program's goals remain the same:

to help newly hired women faculty in the areas of access, balancing work loads, and acculturation. The schedule of events for Year 3 is included as Appendix C.

IMPACT Seminar

The IMPACT Seminar, a two-week seminar, is designed to increase the effectiveness of participating faculty by developing new ways of integrating teaching, research, and service, with a focus on the development of leadership skills. Each cohort meets for one week in May for two consecutive years. To date, 30 faculty have participated in the program. The program has attracted the attention of other institutions, and discussions for conducting the series or including faculty from other institutions are in progress. During the IMPACT seminar, IMPACT Fellows discuss daily readings on leadership in the academe. The seminar also features an in-depth session of 1½ --3 hours on definitions of leadership, leadership styles, and effective communication strategies presented by an invited expert on leadership. (See Appendix D for seminar agenda.) ADVANCE IMPACT Fellows meet regularly with Dr. Christine Reimers, ADVANCE Co-PI and Director of the Center for Effective Teaching and Learning (CETaL), throughout the academic year to work on specific career projects.

What these fellows learn about leadership development in IMPACT is shared with the entire campus through invitation to workshops presented by leadership experts and dissemination of IMPACT best practices. Further discussion and a list of the participants for the third IMPACT Seminar is provided in section B. Findings.

3. Collaborative Leadership

The Collaborative Leadership component continues its focus in two areas: 1) to establish and enhance connections among faculty and administrators, and 2) to create and sustain positive organizational climates and rich organizational cultures that facilitate the recruitment, retention, and promotion of women in the sciences and engineering.

Collaborative Leadership is engaged in finding these connections with Co-PI Pat Witherspoon talking to chairs and facilitating dialogues among chairs, other administrators, and women faculty, as well as faculty engaged in departmental search processes. We are engaged in creating and/or changing climates and cultures through conversations, programs, and projects and are also working with colleagues in university administration to sustain the climates and cultures that will facilitate the recruitment, retention, and promotion of women.

Collaborative Leadership Year 3 accomplishments:

- Interviewed four department chairs as part of our data-gathering process, asking two basic questions: What factors at UTEP affect the recruitment, retention, and promotion of all faculty? What factors affect the recruitment, retention, and promotion of women faculty? Follow-up or probing questions are used in addition to these questions.
- Conducted two Chair Chats or focus group discussions among department chairs of the 18 departments. The following questions guided these discussions: What issues are affecting the recruitment, retention and promotion of faculty in general? Of women faculty in particular? How would you characterize the climate for hiring and retaining faculty at UTEP in general and women in particular? In your college? In your department? What are ways to create community at UTEP that may facilitate collaborative research and teaching, as well as a positive environment among colleagues?
- Conducted three forums for women faculty to discuss the following questions:

What issues exist at UTEP that affect recruiting, retaining, and promoting women? How would you characterize the climate, or psychological environment, at UTEP? Why? How might ADVANCE assist in creating community on campus, to enhance research and teaching collaboration, and socio-emotional support of the faculty? Assistant professors were invited to forums separate from those attended by associate and full professors. Additionally, all women faculty were given the option of visiting individually with the Collaborative Leadership Co-PIs if they chose to keep their comments confidential from other faculty women. Four individuals chose this option.

- Collected best practices with respect to recruitment and retention of underserved groups by searching Web sites, reviewing publications, and interviewing department chairs. Additionally, a workshop for search committees in the College of Engineering was sponsored by ADVANCE and the College and best practices also were enumerated in this forum.
- Conducted research on the pathway to the PhD created or followed by Latinas, an important group of faculty at UTEP, where at least 70% of the student body is Hispanic. By reviewing journal articles and books, most of which have been written in the last 5-7 years, we determined the obstacles faced by women in general and Latinas in particular as they pursued the doctoral degree. This information was helpful in creating strategies for recruitment and retention of Latina faculty and was used to create questions for interviews of women faculty that began in May 2006.
- Began interviewing all tenured and tenure-track women faculty in the 18 ADVANCE departments to determine their pathways to the PhD and their faculty appointment(s). This information will be used to develop strategies for recruitment and retention of women faculty, and it will be published as an NSF report as well as an article in a refereed journal.

A special focus for ADVANCE has been the College of Engineering (COE), where we still face the greatest challenge with increasing the numbers of women. During the past two years, the college has undergone major changes in the administrative structure that has had an impact on climate. To address this, the ADVANCE group and the COE co-sponsored a workshop with a focus on change, climate, effective communication, and forward-based action planning. In November 2005, Dr. Karan Watson, ADVANCE Advisory Board Member and Dean of Faculties and Associate Provost at Texas A&M University, and Nancy Algert, President, The Center for Change and Conflict Resolution, facilitated the workshop. The college leadership, including the Dean, division directors, program heads, and leaders of the strategic direction committees, attended the meeting (total 14 attendees). The topics included managing conflicting, building teams and trust, departmental cultures (including cultures that support female faculty), successful change processes, conflict management, and the COE's organizational culture.

4. Evaluation

Dr. Susan Baker Gonzalez, our second evaluator, resigned in July 2005 to accept a tenured faculty position at the University of Texas at Arlington. After an exhaustive search, in January 2006, we hired two evaluators: Ms. Ann Darnell, who began working for us part-time in February and Dr. Igor Ryabov who began working for us full-time in July 2006. Ms. Darnell continues her work with NSF 12 indicators, and Dr. Ryabov with all other aspects of project evaluation.

Women's presence on the UTEP faculty, as a whole and in the ADVANCE departments, continues to grow in the third year of the ADVANCE program. Women faculty at UTEP, including lecturers, increased from 345 (39.4%) in 2004 to 393 (43.6%) in 2005. ADVANCE department females, including lecturers, grew from 102 (24%) to 108 (26.7%). The faculty at UTEP is comprised of non-tenure track part-time and full-time lecturers and tenure-track or tenured assistant professors, associate professors and full professors. Half of the ADVANCE departments saw a change in tenured and tenure-track female faculty. Three assistant professors received tenure and promotion to associate professor. Two females in Computer Science were promoted from associate professor to full professor. One of these women became the Computer Science department chair. One associate professor in Marketing and Management moved into the Dean's office and is no longer included in the ADVANCE departmental headcount. Nine new female assistant professors and two new female associate professors were hired in ADVANCE departments.

Four females from ADVANCE departments left the university. One full professor retired. One associate professor and two assistant professors left to pursue other opportunities. Only two ADVANCE departments in the College of Engineering remain with no female faculty, with the Metallurgical and Materials Engineering department adding a new female part-time lecturer in the fall of 2005. Civil Engineering hired its first female tenure-track assistant professor.

This year's evaluation did not repeat the space allocation study conducted last year, which found space to be allocated equitably. The only major change regarding space during the past year was in the College of Engineering, where the Engineering Annex was completed.

Change is slowly occurring; the area of primary concern lies in the College of Engineering where the fewest females are found and a lack of female leadership exists. Only one department, Computer Science, has made substantial progress in the hiring, retention, and promotion of females.

Evaluation by Action Board and Advisory Board

The internal Action Board and the external Advisory Board continue to assist us with continuous refinement of the initiative. The ADVANCE team met with the Deans and Provost in January 2006 to describe our activities, share critical issues, and seek guidance, with a special emphasis on how to improve ADVANCE collaboration with the college Deans' offices. The ADVANCE team made two suggestions that have since been implemented: the creation of the position of a Vice Provost for Faculties and the appointment of Faculty Fellows in the Colleges of Engineering and Business to become members of the ADVANCE team and to assist Deans with recruitment and retention. See Appendix E for a description of the Vice Provost for Faculties (renamed Associate Vice Provost for Faculty Development) position and Appendix F for a description of the Faculty Fellows positions. Further discussion of Action Board recommendations is provided in Part B: Findings.

The first week of April 2006, we conducted our third Advisory Board visit. While on campus, the Advisory Board members interviewed administrators, faculty, and staff to assess their understanding of the ADVANCE initiative, to discuss what we've accomplished to date, and to determine what we still must do to institutionalize these efforts. This Advisory Board, itself a diverse group of faculty and business leaders, has worked tirelessly on our behalf and has been an invaluable source of advice and inspiration. The board's Year 3 recommendations listed in the

next section will help us prepare for our third year site visit. They will be the focus of an all-day ADVANCE retreat to be held in August.

A response to the Year 2 recommendations, both from the President of the university and PI Posey written after the annual report was submitted last year, is provided in Appendix G.

B. FINDINGS

1. Policy and Recruitment

GRA Program

The ADVANCE GRA program provides funding to female faculty, in the form of stipends to their students, be they male or female, at a critical time for the career development. These research funds directly convert to faculty productivity. Evidence from faculty testimonials suggests that the combination of the FMPW, IMPACT series, initiatives from Collaborative Leadership, and the GRA program has played a substantial role in the tenure and promotion of female faculty at UTEP since the inception of the ADVANCE grant. In the three years of the grant, 100% of the females from ADVANCE departments who have been evaluated for promotion and tenure have been successful. Other important outcomes of the GRA program include increased awareness of the ADVANCE grant among the male colleagues who participate in collaborative research with their female counterparts and a feeling of good will and appreciation among the administration. Funding for graduate students is a constant challenge, and this aspect of our ADVANCE grant has proved fruitful at many levels.

Female Faculty Recruitment

After three years of working with female recruitment, we have a number of important findings:

- A close working relationship with the EO/AA officer is crucial to the success of diversity hiring. We begin the process of tracking open lines and discussion with search and department chairs and Deans at the beginning of the academic year. We coordinate with the EO/AA officer so that we meet with female candidates as they visit campus. Were these same faculty outreach efforts to be made for ethnic minority candidates, similar successes would no doubt follow.
- The majority of members of search committees are grateful to the role that ADVANCE plays in hosting candidates. They report that the female candidates are energized by learning of the ADVANCE program and are positively impressed with the opportunities that ADVANCE fosters.
- Even for those female candidates who are not offered a position or who decline the offer from UTEP, meeting with candidates provides an avenue for dissemination of knowledge concerning the NSF ADVANCE program and its goals.
- We track, with the help of the EO/AA office, the gender of finalists and campus interview pools for all open faculty lines. Our analysis shows that 78% of the open lines have at least one female candidate in the campus interview pool. Also, very significantly, when females represent at least 33% of the campus interview pool (typically one female among three interviewees), there is a 57% likelihood that the first offer will go to the female. The female has declined 25% of these offers. In all cases we have tracked thus far, these women have placed at other academic institutions.
- These robust recruitment statistics have resulted in 17% female hires in the College of Science, 33% female hires in the College of Engineering, 61% female hires in the SBE

- departments within the College of Liberal Arts, and 25% female hires in the SBE departments of the College of Business Administration.
- Dual career placement continues to be an important aspect of faculty recruitment. This is expressed statistically by 13% of male hires in the College of Science and 17% of male hires in the SBE departments of Liberal Arts being dual career placement.
 - Clearly the institutional commitment to faculty diversity and the opportunities provided by the ADVANCE initiative have had a substantial impact on gender diversity in the STEM and SBE disciplines at UTEP. We find that gender diversity in the junior faculty has a “snowball” effect, with more females applying to and being made offers because of the diversity of the faculty.

2. Faculty Development

The Faculty Mentoring Program for Women (FMPW)

This year’s new faculty participants report that the Faculty Mentoring Program for Women continues to provide significant support in areas that are important for new faculty success. They particularly appreciated the networking opportunities afforded them by the program’s activities and events. Networking with mentors and with other junior colleagues allows them a wider view of how the university works, dissipates some of the isolation associated with newly arriving on a campus one doesn’t know much about, and reminds them that they are not alone with the challenges they face. Participants also mentioned the value of specific kinds of advice and new strategies for teaching, time management and goal setting that helped them survive and thrive in their first year at UTEP. They mention that the program built up their confidence and actually worked as a recruiting tool when they first interviewed. Participants are impressed with the institution because it is willing to invest in them as new faculty women, and this gives them a greater sense of commitment to UTEP.

Participants mentioned the following benefits of the FMPW:

- Creates a network of colleagues and friends, and a chance to meet others on campus at a time of initial isolation.
- Gives an opportunity to talk to others and find out that they are not alone and to troubleshoot challenges they face as new faculty.
- Provides new resources on surviving and thriving in the academic world: teaching effectively in a new institution with a specific student population, grant-writing, choosing which proposals to write, finding fellowships, writing for publication, and getting research done.
- Offers strategies for time management and ways to say “no” strategically and diplomatically.
- Gives a sense of security and belonging at an institution that explicitly recognizes that women have more challenges than men in the academe and provides resources to help.
- Enhances their confidence to set their own goals and match them more strategically with departmental goals.
- Offers opportunities to address issues of balance—among research, teaching and service, and between work and family life.
- Acted as a recruitment tool in their hiring process.

These new faculty made the following suggestions for the program:

- Say explicitly to all mentors and mentees that they must build a *social* relationship with people. Meet regardless of whether there are specific things to talk about. It is the regular

- relationship that helps the most. Have expectations of everyone: make a formal arrangement to get to *know* each other.
- Encourage mentees even *more* to initiate contact with mentoring partners.
 - Vary timing of luncheons and brown bags: schedule some at dinner, some at afternoon tea, even breakfast.
 - Have additional social events.
 - Have a group for moms, single moms, parenting groups.

Mentors in the program report very similar benefits as do the new women faculty. They credit the information provided by the program with getting mentees' research started, that the program builds their confidence and teaches them about the intricacies of the institution. In particular, Mentors mention the social context provided by peer mentors and senior mentors as the most important value of the program. They mentioned specifically that the program:

- Helps mentees get a research agenda started.
- Builds confidence and alleviates new faculty fears.
- Helps mentees coming from different kinds of institutions adjust to local realities.
- Surprised them by how much fun the team mentoring groups are.
- Provided the context for friendships among new faculty.
- Gives mentees more perspectives due to the team mentoring approach.
- Gives mentees someone who is willing to stick up for them.

Mentors suggestions included more events aimed at mentors to help them do their job better and greater support for administrators such as Chairs as well as greater visibility by upper administration in program events. They mentioned specifically:

- Even more support for mentors, brown bags for mentors only, and more specifics on expectations.
- Workshops for department chairs.
- The program to invite Provost, Deans, recently tenured faculty to talk at mentoring luncheons.

IMPACT Seminar

Participants in the year-long IMPACT Seminar report that their experiences gave them better tools for thinking strategically about their careers. They mention in particular time management, goal setting, and strategic thinking and communication in this regard. Participants also credited the program with a better view of the ways in which they might take on leadership roles within their departments and help direct future changes. They mention the value of meeting new colleagues from across the campus with whom they have built a relationship of trust and friendship, and upon whom they can count for future collaborations, whether in research or in service to the university.

Participants specifically mentioned that the program:

- Gave them new strategies for time management.
- Gave them more realistic goals.
- Provided a better focus on integration of teaching, research, service.
- Relieved stress due to improved goal setting and strategic thinking.
- Offered new definitions and avenues for personal leadership in the department and at the university level.
- Provided a network of colleagues across disciplines that they would not have had otherwise, and a new feeling of not being alone, not being isolated.

- Taught them how to ‘pick their battles’ more strategically and focus on things one can influence.
- Gave them new ideas for how to change their own departments.
- Instilled a sense of accountability to others.
- Taught them when to say “no.”

3. Collaborative Leadership

During 2005-06, the ADVANCE team solicited input about issues affecting the recruitment, retention, and promotion of women from department chairs and faculty in a variety of venues. In-depth interviews of chairs in four of the 18 departments under the auspices of the NSF grant were conducted, as has been the case each year of the grant. Chairs in the 18 departments were also invited to attend one of several “chats,” or open discussions, to provide their insights and opinions on issues affecting the recruitment and advancement of women faculty. Additionally, forums were held for tenured/tenure-track women in the 18 departments, allowing them to share examples and opinions about their experiences and observations as women faculty. All interviews and forums were held with the promise of confidentiality; statements were recorded by ADVANCE Co-PIs without attribution. Additionally, women faculty wishing to offer their observations in a one-to-one, rather than a group, setting were given that option by the ADVANCE team.

The following concerns or issues were identified in these interviews and forums:

Chair Interviews

- The city of El Paso can be a “hard sell” to single individuals because it is a “family-oriented” environment. On the other hand, married faculty candidates have a difficult time finding jobs for their spouses in the city even though UTEP is moving forward with an aggressive dual career hire initiative, in part financed by ADVANCE.
- Inadequate resources, e.g. salaries, travel funds, affect UTEP’s ability to be competitive with other universities seeking to hire women in the sciences and engineering.
- There is still “embedded sexism” within some departments that affects departmental efforts to recruit, retain, and promote women.
- Policies related to family medical leave, which ADVANCE is pursuing with UTEP administrators, are important to recruiting women faculty at UTEP.
- Mentoring junior faculty within departments, and across departments, is important to retaining women faculty at UTEP.

Chair Chats

- Promotion and tenure standards need to be clarified as a new Provost begins his work at UTEP and as the university increases its role as a research institution.
- The need to retain faculty is increasing because we have very good faculty whom other campuses are attempting to hire.
- We need to look at hiring research faculty with different teaching loads than faculty who will spend most of their time teaching, not conducting research.
- Lack of resources is a major issue affecting recruitment of all faculty, including women: lack of research leaves; lack of travel money; lack of TA/RA support
- UTEP’s climate, especially within colleges, can be affected by: shared governance issues; too much service work delegated to junior faculty; miniscule raises, even after the award of tenure; receiving late approval to advertise a faculty position.
- We need a sense of academic community at UTEP.

- The Provost's focus on decentralization is a welcome decision to chairs, as well as other administrators and faculty.

Women Faculty Focus Groups:

- The Provost and ADVANCE initiatives have helped create a more positive work climate at UTEP.
- Women faculty are excellent advisers and that strength should be recognized as one reason to recruit women faculty.
- A 3/3 load is too much for a research institution.
- UTEP, and certainly women faculty, could use a maternity leave policy, a new professor handbook, a fall and spring orientation.
- UTEP needs more female department chairs.
- Retention is enhanced by dual career hiring.
- UTEP faculty need opportunities to get together, including research conversations as well as social occasions
- Ways to facilitate professional goals of senior women faculty: development funds, re-tooling time, international travel, staff who can assist with book manuscripts (formatting, not typing), changes in teaching loads, pre-tenure sabbaticals, customer service training for staff.

Suggested action items:

- ADVANCE should establish a research database, listing three to four research interests of each UTEP tenured, tenure-track faculty member. This can be shared with all faculty and chairs, facilitating get-togethers of faculty with similar interests. ADVANCE might also establish brown bag seminars for faculty to talk about their research interests.
- Senior women faculty should offer brown bag seminars on "difficulties we've experienced" and "our strategies for overcoming difficulties."
- UTEP should have a spring faculty orientation; the fall orientation also should last a year, with new faculty meeting once a month.
- UTEP should establish a listserv of department chairs for the chairs to use as a resource.
- Women chairs/program heads should establish support groups and talk about gender issues in academics, including gender and language.
- ADVANCE should obtain a listing of all unfilled UTEP endowed professorships and chairs.

A handout, "Effective Practices and Strategies to Diversify STEM Faculty," based on the best practices research was prepared and distributed to the Deans, Provost, and Associate Vice Provost at the Institutional Action Board meeting in January 2006. (See Appendix H.) Best practices included slowing the tenure clock for family issues, providing research release time at the departmental level, recruiting at national conferences and workshops, placing departmental search ads in Web publications and in newsletters for women published by major academic organizations in science and engineering disciplines.

The research into pathways to the doctoral degree and faculty positions, including interviews of women faculty in the 18 departments, is in its early stages and data-gathering is continuing.

College of Engineering Workshop

The College of Engineering workshop held in November to help the faculty focus on change, climate, effective communication, and forward-based action planning ended with the members of

the group defining three things that they would like to see happen and 3 things that they would like someone else to do. The action items were as follows:

- Form a Faculty Advisory Council.
- Communicate vision (Dean to program heads and faculty).
- Communicate needs (program heads to Dean).
- Create action plans from the advisory council and college climate survey.
- Create a newsletter for the college.
- Rebuild trust and communication.

The Faculty Advisory Council (FAC) has been tasked with reporting faculty concerns to the Dean. To address the issues regarding communication, the Dean has included program heads in weekly meetings and in mission-setting meetings.

4. Evaluation

NSF 12

The NSF 12 Indicators issued in January 2005 by the ADVANCE: IT Working Group were again used to guide the evaluation of the activities and progress made by the NSF ADVANCE Institutional Transformation for Faculty Diversity grant at UTEP. The two major challenges facing the ADVANCE program evaluation at UTEP have been: 1) the lack of continuity of an internal evaluator, and 2) lack of sufficient consistency in the collection of data between years that permits analyses of data over time. Due to the relatively small numbers of tenured and tenure-track female faculty in science and engineering, even slight variation can have a significant impact on percentage.

The method used to address both of these issues has been the creation of a detailed database and data dictionary. While the NSF 12 Indicators and four overarching thematic questions provide a solid framework for the direction of the assessment, without specific data, longitudinal detailed analyses cannot be substantiated due to minor variations in data reporting. The new database has been designed to include the following types of information:

- Name
- Gender
- Ethnicity
- Department
- Title (Asst., Assoc, Professor, Lecturer)
- Tenured, Tenure-Track, Non Tenure-Track
- % Instructional Time
- Start Date
- Leave Date
- Reason for departure
- Salary
- Start Up Package Amount
- Tenure Review Date
- Promotion Date
- Tenured Faculty Administrative Appointment – Yes/No
- Leadership Position (i.e., departmental chair, committee chair, associate dean, etc.)
- Endowed/Named Chair

The data dictionary will provide a detailed description of each field, the type of field, and the source used to obtain each data element. The database will be encrypted and password protected to secure access of faculty information. Field-level access rights for varying types of users will be created to restrict data access to read/write, delete, add, and/or update capability. The ADVANCE evaluator will assume responsibility of verifying data accuracy and security. Data derived from the NSF 12 indicators populate the database. Once completed, this database will facilitate ease of transition between evaluation personnel and increased accuracy of the NSF 12 quantitative indicators. Automatic data feeds from other UTEP systems will be requested annually from the Information Technology department to update the ADVANCE faculty database. At the end of the ADVANCE grant, the faculty database will be offered to the Provost's office.

The NSF 12 indicators designed to report on the activity and progress at all ADVANCE institutions are included below for discussion in this annual report. The table(s) and graphs associated with each indicator may be found in Appendix I.

1. Number and percent of women faculty in science/engineering by department (Table 1A and 1B)
2. Number and percent of women in tenure-track positions by rank and department (Table 2)
3. Tenure promotion outcomes by gender (Table 4)
4. Years in rank by gender
- 5a. Time at institution (Table 8) and b. Attrition by gender
6. Number and percent of women in science and engineering who are in non-tenure-track positions (teaching and research) (Table 3)
7. Number and percent of women scientists and engineers in administrative positions (Table 5)
8. Number of women science and engineering faculty in endowed/named chairs (Table 5)
9. Number and percent of science and engineering faculty on promotion and tenure committees (Table 5)
10. Salary of science and engineering faculty by gender (Table 6)
11. Space allocation of science and engineering faculty by gender (not repeated in 2006)
12. Start-up packages of newly hired science and engineering faculty by gender (Table 7)

The toolkit assembles these indicators into four overarching thematic questions.

- 1) What is the distribution of science and engineering faculty by gender, rank and department?
- 2) What are the outcomes of institutional processes of recruitment and advancement for men and women?
- 3) What is the gender distribution of women science and engineering faculty in leadership positions in the institution?
- 4) What is the allocation of resources for science and engineering faculty by gender at the institution?

Indicators 1, 2, and 6 address the first thematic question of faculty distribution. The University of Texas at El Paso ADVANCE initiative separates 18 departments residing in four colleges into three areas of Science, Technology, Engineering, and Mathematics (STEM), Social & Behavioral Sciences (SBS), and Business. Tables 1A and 2 show the number and percent of all faculty at UTEP and in the ADVANCE departments, and the number and percent that are female. Based on the data as of fall of 2005, 43.7% of the 900 faculty are female and 26.8% of the ADVANCE

departments' faculty are female. This represents a 1-year gain at UTEP of 4.3% for all UTEP female faculty and 2.8% in the ADVANCE departments. While still lagging behind national averages (National Science Foundation, Science and Engineering Indicators 2004), female faculty at UTEP and in ADVANCE departments have increased each year of the grant. These figures include all tenured, tenure-track, and non-tenure track faculty, excluding administrative appointments.

	All UTEP			ADVANCE Departments		
	2003	2004	2005	2003	2004	2005
Total	568	876	900	295	425	403
Females	203	345	393	61	102	108
% Female	35.7	39.4	43.7	20.7	24.0	26.8

The lag behind national averages reflects the demographics of UTEP, a Hispanic-Serving Institution (HSI), with over 70% of its student body composed of students of Hispanic descent. UTEP's ADVANCE faculty reflects this student body, with a slightly higher percentage of Hispanic female faculty (6.6%) than the national average of 5.9% at research universities (National Science Foundation, Science and Engineering Indicators 2004; Table 5-8). Of the nine females hired in ADVANCE department tenure-track positions during 2004-05, one-third are Hispanic.

Table 1B shows all faculty, including non-tenure track lecturers, by gender and department for all ADVANCE departments, and Table 2 shows only tenure-track positions. Table 1B illustrates half of the 18 ADVANCE departments decreased in the number of faculty between the fall of 2004 and fall 2005, but only four departments decreased in the number of female faculty. Only one female tenure-track position decreased (in Psychology), resulting from a professor retiring. Primarily, reductions resulted from part-time lecturers converting to full-time lecturers. The percentage of ADVANCE female faculty ranges from 0% in two Engineering departments to 54.5% in Languages and Linguistics, a SBS department. The recent appointment of a female in Civil Engineering will alter that department's 0% in the Year 4 Report; however, the Metallurgical and Material Engineering department that currently reports one part-time lecturer as their only female, hires that faculty member only in overflow semesters when need exists. She is employed as a staff member in the College of Engineering and is able to teach when needed. Mechanical and Industrial Engineering is the only other department that remains with no female faculty. Eleven of the ADVANCE departments saw an increase in the percentage of female faculty, some of these resulting due to a decrease in departmental faculty headcount.

Female faculty in tenure-track positions (Table 2) increased in five ADVANCE departments from the previous Year End Report -- three additional tenure-track females in STEM and three in SBS. Business remained flat at five. All three ADVANCE areas of STEM, SBS, and Business showed a higher percentage of total females when compared to the previous year (Table 3). When looking at only the tenured and tenure-track faculty, the ADVANCE Business departments have the lowest percentage of tenured/tenure-track females at 12.5%, followed by STEM at 16.1% and SBS at 29.4%. When STEM is separated into Engineering and Science, Engineering has 10.4% tenured/tenure-track females and Science has 20.7%. Comparing tenure-track positions between years (Table 2), ADVANCE departments increased the number of females in each tenure-track position from fall 2004 to fall 2005.

ADVANCE Departments			
<i>Female</i>	2003	2004	2005
Professor	6	9	10
Associate Professor	13	11	13
Assistant Professor	19	24	26
Total	38	44	49

Indicators 3, 4, and 5 address the second thematic question of institutional processes of recruitment and advancement. Two of the three indicators were unavailable in previous years and the previous ADVANCE evaluator had planned to begin collection of this information during the past year. Because the evaluator left UTEP and another evaluator did not begin until February 2006, only partial collection of this data has been completed. The Provost's office was able to provide spreadsheets with hire dates for all ADVANCE tenure-track faculty. These data were imported into the database, from which the time at UTEP was calculated (Table 8). In analyzing the data, it was apparent that several outliers distorted the average time at UTEP. One female assistant professor is tenured, with 39 years at the university. Two male assistant professors have been at the university for 32 and 49 years. A median length by tenure-track position was figured to address the outliers. While the 4th NSF Indicator of years in rank by gender has not been totally calculated, this provides a range for time at institution by position type, by gender. The average length of time for assistant professor, associate professor, and professor are all less for females than males. The median male assistant professor in an ADVANCE department has been at UTEP for four years, versus two years for a female. Associate professors have a two year higher median for males than females, while male full professors have been at the institution more than twice as long as their female counterparts. This table demonstrates the number of women recently hired into tenure-track positions at the university. Those who have been promoted are reported at their rank as of fall 2005. For this reason, years in rank by gender must be calculated based on promotion date rather than hire date. A graduate assistant was hired in June 2006 to assist the evaluator. He is in the process of going to the department Web pages to retrieve the last promoted date of faculty from their CVs and inputting this information into the database. It will be used to generate Table 10: Years in Rank By Gender. This table will be completed by the end of summer for all ADVANCE tenure-track faculty.

In the ADVANCE departments, the two female assistant professors who came up for tenure received tenure and promotion to associate professor (Table 4) in the Academic Year 2005-06. Notably, all 28 UTEP faculty who came up for tenure and/or promotion were approved this year. Four of the six colleges at the university have a 3rd year tenure review process and all faculty are receiving guidance on preparation for the tenure and promotion process. This preparation initiated through the ADVANCE project can be seen in the results of this year's outcomes.

Indicators 7, 8, and 9 address the third thematic question of women science and engineering faculty in leadership positions in the institution. While the changes in numbers are small over the past year, the climate of the institution continues to be supportive of female leadership, as is evident by having a female university President who also chairs the National Science Foundation Board. Over the past academic year, one female associate professor in Marketing and Management was promoted from an assistant Dean to associate Dean in the College of Business Administration. Two women in Computer Science were promoted to full professors, one of whom is chairing the department. The number of women on college tenure and promotion committees has increased by one each in Business and Liberal Arts, the college housing the SBS departments. Over 40% of our top leadership is female, with female associate Deans in STEM at

50% and endowed and named chairs awarded to six faculty in Liberal Arts, three of whom are women (Table 5).

Many endowed chair positions remain vacant, with no females represented in the other three ADVANCE colleges. There is still a lack of female Deans in all four ADVANCE colleges. Engineering is the only ADVANCE college without a female on its promotion and tenure committee; however, the College of Science continues to have three women (50%) faculty members.

Indicators 10, 11, and 12 address the last thematic question of allocation of resources for science and engineering faculty by gender. Allocation of resources consists of salary, space allocation, and the composition of start-up packages for new faculty members. Salary data were collected from the UTEP Budget 2005-06 located at the university Library and entered into the longitudinal database. Salary data were only collected on tenure-track faculty, as many lecturers were not included in the budget. Results of this research can be misleading, based on the small number of females in full professor positions. In general, salaries appear to be comparable between males and females (Table 6). When reviewing mean salary for assistant professors in STEM and SBS areas, females mean salary is approximately \$3,000 less than their male counterparts. This might be explained by looking at the median length of time at the institution that is two years less for females than males at the assistant professor level (Table 8). The column showing salary for females as a percentage of males ranges from 93.3% for full professors in STEM to 110.9% for full professors in SBS. Length of time at institution and the small numbers of females at this level contributes to the variation in salary means.

Space allocations were not repeated this year because no significant differences emerged in the space allocation study last year. The College of Engineering addition was completed and the department of Electrical and Computer Engineering moved into the new annex. The only other Engineering department with females, Computer Science, did not move. The three female faculty members affected by the move were clustered with other faculty sharing the same research interests. All faculty offices are uniform in size. The females were assigned offices on the west side, considered to have the best view.

Start-up packages for the four colleges with ADVANCE departments were submitted in varying formats (Table 7). Wide variation exists not only across colleges, but across departments as well. Equipment for laboratory start-up constitutes the bulk of the funding. From individual start-up packages analyzed, it does not appear that start-up is based on gender, but rather need. The College of Business only provides \$3,000 for travel/moving expenses, regardless of gender. The College of Science appears to have differences in mean start-up packages. Female mean start-up packages were noticeably lower than that of males; however, departmental need, rather than gender, could attribute to the differences between means. The College of Engineering had one female who received a start-up package equal to the amount another male faculty member received. The other two male faculty members hired in the College of Engineering received a substantially lower amount. Male start-up packages doubled that of women start-up packages for the College of Liberal Arts. This can be attributed to one male faculty who received a substantially larger amount of funding for equipment, therefore shifting the mean.

Summary

The NSF 12 Indicators provide a guideline for reporting longitudinal quantitative data describing the activities and progress affecting women faculty in Science and Engineering. Reported annually, these 12 Indicators are used across ADVANCE institutions, providing a means of

common reporting to increase the potential for comparability of the data. Data comparability is essential for a national-level evaluation of the ADVANCE: Informational Transformation program throughout the grant period. The major theme emerging from this quantitative study are that while change is slowly occurring, the university continues to lag behind national representation of females in STEM and needs to accelerate in this area.

As of fall 2005, UTEP has seen an increase in female faculty positions as well as female leadership roles. Across the university, there has been a one year gain of 4.3% in women faculty and 2.8% for women faculty in ADVANCE colleges. The percentage of women faculty in ADVANCE departments continues to lag behind that of the university as a whole. Female faculty tenure-track positions in the four ADVANCE colleges increased this year compared to the academic year 2004-05. However, both the colleges of Business Administration and Engineering have departments weak in female representation at the tenure-track level.

With respect to institutional retention and advancement of female faculty, a review of time at institution, along with low female attrition in tenure-track ADVANCE positions, indicates that female faculty are being hired and retained. Nine new female assistant professors and two associate professors were hired between the 2004-05 and 2005-06 academic years. Over the past year, only four females from ADVANCE departments left the institution, one for retirement reasons. Women at the assistant professor level had a median number of two years, compared to four years for men at that level. Women also had a lower median number of years at the institution at the associate and full professor levels. Although premature, one might deduce that women are not “getting stuck” at the lower levels. What remains to be explored is what is happening to the large number of non-tenure track positions in ADVANCE departments held by women.

Evaluation during the next year will focus on both tenure and non-tenure line positions. Continued evaluation research is essential to assess the extent to which changes in university climate with respect to gender make the university a more comfortable working environment for non-tenure track women, creating opportunities for these women to pursue the tenure-track option should they so desire. Both attrition from the university and time in rank by gender should be analyzed longitudinally. Numbers are insufficient to make a generalized statement from one year’s research. Collaboration with the Office of the Provost and the Center for Institutional Evaluation, Research, and Planning (CIERP), and the College Administrative Officers (CAO) in each ADVANCE college needs to continue in order to maintain a database with accurate and current automated system updates. Without this collaboration, holes will remain in the data. Additionally, department Web sites and administrative personnel should be consulted to verify data accuracy.

The past year’s evaluation has been limited to the NSF 12 Indicators, but with the addition of a new full-time evaluator and a new graduate assistant, both quantitative and qualitative studies will be conducted to address the institutional transformation of female faculty in STEM at the University of Texas at El Paso.

Evaluation by Action Board and Advisory Board

After a brief update on ADVANCE activities, the January 2006 meeting with the Deans and Provost centered on these questions: 1) How are the colleges addressing the challenge of recruiting, retaining, and promoting a diverse faculty? 2) How can the colleges and ADVANCE work together to achieve this goal? 3) How can ADVANCE work more effectively with the Institutional Action Board to institutionalize initiatives?

Responses to the questions were as follows:

Recruitment:

- Recruiting pool is small. Science is doing a good job generating applications.
- Identify PhD students and recruit at conferences.
- Look at searches more proactively.
- Identify people early.
- People get excited, but need resources to continue momentum.
- Training of search chairs.
- Follow up on search process: Faculty Fellows can follow up when individuals drop out of search.

Retention:

- The College of Liberal Arts buys lunches for Health Science faculty to get together and talk about border health issues, write grants, collaborate.
- Minority men also need mentoring.
- Institutionalize third year reviews.
- Create flexible tenure track appointments (1/2 time).
- Collaborate with research centers.
- Empower chairs to use resources wisely, be flexible in assigning teaching assignments.
- Permit faculty to extend 18 hours of teaching over entire year.
- Allow faculty to buy research time during long semester by teaching during the summer.
- Tenure clock extension policy: conversation needs to take place in Faculty Senate about timing and expectations.
- Department environment is important; department development and recruitment go hand in hand.
- Research will have to be funded by increase in enrollment.

Collaborate with ADVANCE:

- Department action plans would be better than college-wide plans.
- UTEP is not a mentoring campus. Need to get chairs to value mentoring.
- Continue work on dual career couple hire policies.
- Develop leadership workshops for chairs.
- Develop model for departmental mentoring programs.

Advisory Board

At the conclusion of the April meeting, Advisory Board member Lisa Frehill presented the board's recommendations for preparing for the third year site visit and for improving the initiative overall. As to be expected at the mid-way point of the initiative, the Advisory Board turned its attention to increasing dissemination and demonstrating sustainability. Because the UTEP ADVANCE project has had difficulty retaining evaluators, there is still significant work to be done in this area as well. Suggestions for improving the UTEP ADVANCE initiative include:

Improve Data Gathering:

- Compare UTEP data to other ADVANCE institutions.
- Compare UTEP data to national data. Break out by rank, gender, and ethnicity.
- Break out data for Engineering, Sciences, and Social Sciences.
- Emphasize what is happening with women of color.

- Look at male primary hire vs. female primary hire with dual career couples.

Increase Dissemination:

- Develop a fact sheet and develop an article for the *Chronicle of Higher Education*.
- Invite Journalist Liz Smith to campus to learn about ADVANCE.
- Work with the local newspaper, the *El Paso Times*, to develop a link to UTEP information and stories.
- Consider elements and practices to be shared with other institutions.

Demonstrate Sustainability:

- Demonstrate sustainability: determine who will champion the program when ADVANCE is gone?
- Show engagement of male faculty.
- Increase connections to “pipeline” programs such as AGEP.

As described in the original proposal, the President and Provost have agreed to provide financial support to sustain a number of ADVANCE initiatives including the Faculty Mentoring Program for Women, the Impact Seminar, and funding for dual career hires. The Provost’s office is working to ensure that institutional policies and processes on dual-career couple hiring, family leave, university-wide mentoring, and third-year tenure review are widely disseminated and enforced.

The university will continue to assess the university departmental climates and share best practices. The remaining two academic colleges (Education and Health Sciences) will be invited to participate in all parts of the program to ensure campus-wide dissemination of all ADVANCE initiatives. The creation of an Associate Vice Provost for Faculty Development will have a significant and long-lasting impact on the institution as it continues to work to improve recruitment and retention, refine policy, build leadership capacity, and change departmental climate.

As anticipated, the ADVANCE program is feeding on its own success and sends a clear message to UTEP faculty, staff, and students that not only are we committed to a campus climate that values diversity, we are taking action to transform this university.

C. TRAINING AND DEVELOPMENT

The NSF ADVANCE initiative sponsored numerous training and awareness sessions during 2005-06. A partial list is provided below. For a complete list of dissemination activities, see Appendix J.

1. ADVANCE sponsored training activities:

- **IMPACT Seminar:** designed to increase the effectiveness of participating faculty by developing new ways of integrating teaching, research, and service, and by developing leadership skills. Fifteen were funded by NSF ADVANCE (\$22,970) while 3 were funded by the Provost (\$3,748):

ADVANCE funded:

Stephen Aley, Associate Professor, Biology
 John Bretting, Assistant Professor, IPED
 Martine Ceberio, Assistant Professor, Computer Science
 Andre Ellis, Assistant Professor, Geological Sciences
 Nasir Gharaibeh, Assistant Professor, Civil Engineering

Virgilio Gonzalez, Assistant Professor, Electrical and Computer Engineering
Kastro Hamed, Assistant Professor, Physics
Kyle Johnson, Assistant Professor, Biology
Lawrence Lesser, Associate Professor, Mathematical Sciences
Mahesh Narayan, Assistant Professor, Chemistry
Juan Noveron, Assistant Professor, Chemistry
Richard Pineda, Assistant Professor, Communication
Parisa Shokouhi, Assistant Professor, Civil
Stacey Sowards, Assistant Professor, Communication
Luis Trueba, Assistant Professor, Metallurgical and Materials Engineering

Provost-funded:

Beth Brunk-Chavez, Assistant Professor, English
Anne Giangiulio, Assistant Professor, Art
Robert Gunn, Assistant Professor, English

- Mentoring Luncheons: The Faculty Mentoring Program for Women sponsored monthly sessions where issues of effective scholarship and publishing, mentoring success, goal setting and personal success strategies, and networking were discussed.
- Brown Bag Lunches: monthly informal lunch meetings for pre-tenure women faculty around readings and issues of concern to them.
- Co-sponsored “Conflict Management Workshop,” facilitated by Drs. Karan Watson and Nancy Algert, with the College of Engineering.

2. ADVANCE sponsored awareness meetings:

- President and Provost Meetings: ADVANCE team met with the President and Provost separately to discuss the ADVANCE initiative and its progress, September 2005.
- Dean of Business Meeting: ADVANCE team met with Dr. Robert Nachtmann, new Dean of Business, to introduce him to the ADVANCE initiative, October 2005.
- Action Board Meeting, January 2006.
- Deans’ Council: Dr. Posey discussed Faculty Fellow initiative, February 2006.
- Chair Chats: Dr. Witherspoon met with chairs to identify ideas, concerns, and suggestions related to recruitment, retention, and promotion of faculty, February 2006.
- Advisory Board Meeting, April 2006.
- “Notions of Leadership”: Dr. Witherspoon presented to IMPACT participants on the importance of collaborative, emergent, and distributed leadership in organizations, including universities, May 2006.

To increase awareness of ADVANCE, PI Evelyn Posey also presented on ADVANCE accomplishments to the following campus groups in February and March 2006.

- Administrative Forum: UTEP Administrators.
- AGEP students attending “Issues in Higher Education” graduate class.
- College of Business Executive Council.
- College of Engineering Leadership Team.
- College of Liberal Arts Chairs’ Meeting.
- College of Science.
- Faculty Senate.
- English Departmental Meeting.

In addition, members of the ADVANCE team made the following contributions to the UTEP campus:

- Dr. Witherspoon served as a member of a committee to establish a leadership development program at UTEP in fall 2005.
- Dr. Witherspoon serves on the steering committee of UTEP's NCAA Recertification self-study; she is chair of the subcommittee on gender equity and student welfare.
- Dr. Witherspoon chaired and authored a report from an institution-wide committee on department chair roles and responsibilities at UTEP. Her committee's recommendations were submitted to the institution's Provost in early October 2005. Recommendations, including the creation of a Chair's Council, to be implemented in 2006-07.

3. Training and Development Sessions Attended by ADVANCE Personnel:

- UTEP EO/AA officer: Dr. Anthony and Ms. Renner met to coordinate efforts for faculty recruitment and record-keeping practices to evaluate success of ADVANCE recruitment strategies.
- "Searches Made Simple: 10 Steps to Successful Academic Hiring": Drs. Posey and Anthony and Ms. Renner attended audio conference presented by Lauren A. Vicker and Harriette Royer, March 2006.
- NSF ADVANCE Meeting: Washington, DC, May 2006.

D: OUTREACH

Members of the ADVANCE team provided outreach to members of other communities. A partial list is provided below. For a complete list of dissemination activities, see Appendix J.

The following activities occurred in 2004-05, but were not reported.

- Dr. Gates presented "Having a Career and a Life," at the Computing Research Association- Women (CRA-W), Graduate Cohort Program, February 2005.
- Dr. Gates presented "Race/Ethnicity and Gender in Academia" at the Preparing Future Faculty STEM Institute, Howard/UTEP Alliance for Graduate Education and the Professoriate Program, June 2005.
- Dr. Gates presented "Successful Academic Job Search and the Tenure Process," at the GEM Future Faculty and Professionals Symposium, GEM Annual Conference, July 2005.
- Dr. Gates presented "Lessons Learned and Borrowed: Success in the Academe" at the GEM Future Faculty and Professionals Symposium, GEM Annual Conference, July 2005.

The following activities took place in 2005-06.

- Dr. Gates, presented "How to Navigate the Tenure Process," at the Academic Workshop for Underrepresented Participants, Texas A&M College Station, September 2005.
- Dr. Witherspoon presented on leadership and communication to UTEP Leadership Development participants in September 2006.
- Dr. Witherspoon presented "Communicating Leadership: The Next Generation," at the National Communication Association annual convention, November 2005.
- Dr. Witherspoon presented "Conflict and Mediation" at an Emerging Leader workshop at New Mexico State University, January 2006.
- Dr. Witherspoon presented "Women as Builders of Communities and Dreams" for

- Women's History Month at Ft. Bliss Army Base, El Paso, TX, March 2006.
- Dr. Gates presented "From Pen and Ink to Point and Click" to the El Paso Chapter of the American Association of University Women to discuss her role on the NSF Advisory Board for Cyberinfrastructure and the ADVANCE program, May 2006.
- Dr. Anthony presented "Using Quantitative Indicator Data" at the ADVANCE PI Meeting, May 2006.
- Dr. Posey co-led the roundtable discussion, "Implementation and Use of New Policy Initiatives," at the ADVANCE PI Meeting, May 2006.
- Ms. Renner was a discussant in the "What Works and How Do We Know? Coaching and Mentoring" session at the ADVANCE PI Meeting, May 2006.
- The UTEP ADVANCE team presented a poster, "IMPACT Seminar," at the ADVANCE PI Meeting, May 2006.
- Dr. Posey and Ms. Renner presented "Focusing the Lens on Women Faculty Issues: Three Years of ADVANCE at the University of Texas at El Paso" at the American Society for Engineering Education annual meeting, June 2006.

III. PUBLICATIONS

A. JOURNAL PUBLICATIONS

Anthony, E., "NSF ADVANCE Initiative: Institutional Transformation to Achieve Faculty Diversity", *Geological Society of America Abstracts: Special Session Minorities, Women, and Persons with Disabilities in the Geosciences: Continuing Issues and Innovative Solutions*, (2004). Submitted

Anthony, E. and Bell, R., "Empowering Women Scientists and Engineers: The ADVANCE Program at the NSF", *American Geophysics Union Abstracts: Special Session on Strategies for Academic Success*, (2004). Submitted

Archuleta, R.J.; Hoppes, Y.P.; and Primm, T.P., "Mycobacteria Enter a State of Metabolic Dormancy in Response to Starvation", *Tuberculosis*, vol. 85, (2005), p. 147. Published

Benedict, B.; Fisher, W.W.; Golding, P.; Ortega, R.; Osegueda, R.; and Perez, L.T., "Basic Engineering Science and Technology Success for Students at Community Colleges and Universities," *Extreme Makeover: Improving Education in the Classroom to Ensure Student Success*, (2004). Published

Brouthers, L. E.; Donnell, E.O.; and Hadjimarcou, J., "Generic Product Strategies for Emerging Market Exports into Triad Nation Markets: A Mimetic Isomorphism Approach," *Journal of Management Studies*, vol. 42, (2005), p. 225. Published

Brouthers, L. E.; Story, J.W.; and Hadjimarcou, J., "An Investigation of Three Strategies for Overcoming Negative Country of Origin Stereotypes", *The 2nd Annual JIBS/AIB/CIBER Invitational Conference on Emerging Research Frontiers in International Business*, (2004). Published

Brouthers, L. E.; Story, J.W.; and Hadjimarcou, J., "Signaling Theory and Country of Origin Effects", *Journal of International Business Studies*, (2005). Revise and resubmit

Brouthers, L. E.; Story, J.W.; Hadjimarcou, J.; and Brouthers, K., "Can Developing Country Firms Overcome Negative Country of Origin Stereotypes?" *Academy of International Business*

Conference. Submitted

Cappell, Ezra, "Review Essay: Key Text in American Jewish Culture, Jack Kugelmass, ed.", *Modern Jewish Studies*. Accepted

Coronado, I.; Garcia, S.; Jaramillo, P.; Martinez, V.; and Navarro, S., "Latina Trailblazers in the Texas Política Arena," *Políticas*, (2005). Submitted

Fernandez, L.; Amastae, J.; and Howard, C., "Education and Migration in a Border City," *Journal of Borderland Studies*, vol. 18, (2004), p. 2. Published

Fernandez, L.; Howard, C., and Amastae, J., "Education, Race/Ethnicity and Out-migration from a Border City," *Population Research and Policy Review*, vol. , (), p. . Submitted

Fernandez, L. and Amastae, J., "College Students Use of Cross-Border Health Services," *Population Research and Policy Review*. Submitted

Fernandez, L., and Amastae, J., "Transborder Use of Health-Related Services Among College Students in a U.S. Border City," *Journal of Borderlands Studies*, vol. 21, (2006). Published

Fernandez, L.; Howard, C.; and Amastae, J., "Education, Race/Ethnicity and the Decision to Leave: the Case of a U.S.-Mexico Border City." *Population Research and Policy Review*, vol. 26 (2007). Forthcoming

Gonzalez, H.O. and Bain, L.J., "Physiological Changes and Differential Gene Expression in Mummichogs (*Fundulus heteroclitus*) Exposed to Arsenic", *Aquatic Toxicology*, vol. 77, (2006), p. 43. Published

Garcia, M. F., "Note on the Importance of Self-Enhancement in a Job-Search Context," *Academy of Management Meeting*, (2006). Accepted

Gardner, E.; Nevarez, A.; Garbalena, M.; and Herndon, W.C., "Infrared Spectra and Conformational Analysis of Anti and Gauche Deuterated Ethanol Isopotomers," *Journal of Molecular Structure*, vol. 78, (2006), p. 249. Published

Gardner, E.; Blough, S.; Gursky, J.; and Bonilla, L., "The Properties of Colloidal Layered Double Hydroxides," *231st ACS National Meeting*, (2006), p. 26. Published

Gonzalez, H.O. and Bain, L.J., "Physiological Changes and Differential Gene Expression in Mummichogs (*Fundulus Heteroclitus*) Exposed to Arsenic", *Environmental Health Perspectives*. In preparation

Gursky, J.A.; Blough, S.D.; Luna, C.; Gomez, C.; Luevano, A.N.; and Gardner, E.A. "Particle-Particle Interactions of Layered Double Hydroxide Nanoparticles," *Journal of American Chemistry Society*, (2006). In revision

Lair, S.L; Herndon, W.C.; Murr, L.E.; and Quinones, S.A., "End Cap Nucleation of Carbon Nanotubes," *Carbon*. Submitted

Lee, W.-Y.; Iannucci-Berger, W.; Eitzer, B.D.; White, J.C.; and Mattina, M.J.I., "Quantitation of Soil-to-Plant Transfer of Weathered Chlordane: Consequences for POPs Cycling and Phytoremediation," *Environmental Toxicology and Chemistry*, vol. , (), p. . Accepted

Leonidou, L.C.; Kaminarides, J.S.; and Hadjimarcou, J., "Exploring Manufacturer-Customer Relationships: Domestic Versus Foreign Business," *Thunderbird International Business Review*, vol. 45, (2004), p. 545. Published

Luna, C.; Gardner, E.A.; and Vasquez, A.N., "Utilizing Metal Enhanced Fluorescence for Imaging Latent Fingerprints," *230th ACS National Meeting*, (2005). Published

Maldonado, R.A.; Kuniyoshi, R.K.; Linss, J.; and Almeida I.C., "Molecular Characterization, and Biochemical and Comparative Studies of the Oleate Desaturase from *Trypanosoma Cruzi*," *Journal of Parasitology*, (2005). Submitted

Mattina, M.J.; Eitzer, B.D.; Iannucci -Berger, W.; Lee, W.-Y.; and White, J.C., "Plant Uptake and Translocation of Highly Weathered, Soil-Bound Technical Chlordane Residues: Data from Field and Rhizotron Studies," *Environmental Toxicology and Chemistry*, vol. 23, (2004), p. 2762. Published

Mendes Nascimento, E.M.; De Sousa Gehrke, F.; Maldonado, R.A.; Colombo, S.; Da Silva, L.J.; and Sato Schumaker, T.T., "Identification of Brazilian Spotted Fever Infection by Polymerase Chain Reaction in a Patient from Sao Paulo State," *Memorias do Instituto Oswaldo Cruz*, vol. 110, (2005), p. 277. Published

Montoya, J.; Verela-Ramirez, A.; Shanmugasundram, M.; Martinez, L.E.; Primm, T.P.; and Aguilera, R.J., "Tandem Screening of Toxic Compounds on GFP-Labeled Bacteria and Cancer Cells in Microtiter Plates," *Biochemistry and Biophysics Research Communications*, vol. 335, (2005), p. 367. Published

Morales, A. and Fernandez, L., "The Social Origins and Prospects for Mobility of Recent Mexican Law School Graduates," *Social Science Quarterly*. Submitted

Pearson, R.; Fitzgerald, R.M.; and Polanco, J., "An Inverse Reconstruction Model to Retrieve Aerosol Size Distribution from Optical Depth Data," *Journal of Applied Optics*. Pending.

Rajabi, L.; Courreges, C.; Montoya, J.; Aguilera, R.J.; and Primm, T. P., "Actophenones With Selective Antimycobacterial Activity," *Letters in Applied Microbiology*, vol. 40, (2005), p. 212. Published

Ramirez, O.; Perez, C.; Andrade, A.; and Garza, K.M., "The Effect of Leptin-Deficiency on Dendrite Cell Function." *Journal of Immunology*, (2006). Submitted.

Renner, J. and Posey, E., "Focusing the Lens on Women Faculty Issues: Three Years of ADVANCE at the University of Texas at El Paso," *Proceedings of the American Society for Engineering Education*, (2006). Published

Torreclillas, A.C.; Nohara, L.L.; Nakayasu, S.E.; Jacysyn, J.F.; Maldonado, R.A.; Ropert, C.; De Souza, W.; Cunha-E-Silva, N.L.; Andrade, D.; Scharfstein, J.; Golenblock, D.; Gazzinelli, R.T.; Colli, W.; Alves, J.M.; and Almeida, I.C., "Trypanosoma Cruzi Releases Alphagalactosyl-Rich

Vesicles That Enhance Host Cell Invasion by Engaging Toll-Like Receptor 2." *Journal of Biological Chemistry*, (2005). Submitted

Tran, T.; Saheba, E.; Arcerio, A.; Chavez, V.; Martinez, L.E.; and Primm, T.P., "Quinones As Antimycobacterial Agents", *Bioorganic & Medicinal Chemistry*, vol. 12, (2004), p. 4809. Published

Valerio-Flores, O.L.; Murr, L.E.; Hernandez, V.S.; and Quinones, S.A., "Observations and Simulations of the Low Velocity to Hypervelocity Impact Crater Transition for a Range of Penetrator Densities Into Thick Aluminum Targets", *Journal of Materials Science*. Accepted

Walsh, E. J.; Arroyo, M.L.; Schroder, T.; and Wallace, L., "Species Richness and Species Turnover (Complementarity) of Rotifera in Selected Aquatic Systems of Big Bend National Park, Texas," *Southwestern Naturalist*. Accepted

Walsh, E. J.; Schroder, T.; Bonilla, M.L; and Wallace, R.L., "Interannual Variation of Rotifera Among Selected Sites in Big Bend National Park (Texas, USA)," *Hydrobiologia* (2006). Submitted

Ward, K.; Hollingsed, T.; and Aldaz-Salmon, J.A., "Acknowledgement Use With Synthesized and Recorded Prompts," *Proceedings of the 5th SIGdial Workshop on Discourse and Dialogue*, (2004), p. 85. Published

Ward, K., "The Fifty-Four-Day Thesis Proposal: First Experiences With a Research Course," Sixth Annual Northwestern Regional Conference of the Consortium for Computing Science in Colleges, (2004), p. 8. Accepted

Witherspoon, Patricia. "Communicating Leadership: The Next Generation," *National Communication Association Annual Convention*, (2005). Published

Zhang, J.-Y.; Megliorino, R.; Peng, X-X.; Chan, E.L.; and Tan. E.M., "Antibody Detection Using Tumor-Associated Antigen Mini-Array in Immunodiagnosing Human Hepatocellular Carcinoma," *Journal of Hepatology*, (2006). Submitted

B. BOOKS OF OTHER ONE-TIME PUBLICATIONS:

Eds. Hansen, Ellen and Mattingly, Doreen, "Women Leaders at the Border: Styles, Strategies and Issues", *Border Women in Movement: Tucson, Arizona*, (2005). Submitted

Eds. Eschle, Catherine and Maignasscha, Bice, "Resistance on the Global Frontlines: Gender Wars at the U.S.-Mexico Border with Kathleen Staudt.", *Critical Theories, World Politics and the Anti-Globalization Movement: Routledge, London*, (2005). Published

Posey, E., Reimers, C., and Andronicos, K., "A Faculty Mentoring Program for Women: Building Collective Responsibility for Developing a Highly Qualified Faculty," *Book Chapter* Submitted of Collection: Abigail Stewart, *Advancing Women in Science and Engineering: Lessons for Institutional Transformation: University of Michigan Press*, (2006).

Witherspoon, Patricia. "Organizational Leadership: A Communication Perspective," in Paul Sanders, Anthony Condi, and Chad Walker, *Leading to Greatness: Building True Success Wherever You Live and Work: Lexington, KY: Luminary Series*, 2005.

C. OTHER SPECIFIC PRODUCTS

Brochure

“NSF ADVANCE: Institutional Transformation for Faculty Diversity”

Revised and updated brochure provides information about the UTEP NSF ADVANCE initiative. This brochure is used both on and off-campus to promote ADVANCE.

Brochure

“New Mexico State University and the University of Texas at El Paso Dual Career Opportunities” brochure.

UTEP and NMSU use this as part of their faculty recruitment efforts, striving to jointly increase methods of accommodating the needs of dual career couples.

Data or databases

Faculty Work-Life Survey (modification of the University of Wisconsin Madison Faculty Work-Life Survey)

This survey establishes baseline data for issues of culture and climate to draw distinctions across gender, ethnicity, departments and colleges and to document a case study for future research and publications. The survey will be re-administered in Spring 2006.

Data or databases

NSF Quantitative Indicators of Activity and Progress

This database tracks UTEP faculty, based on fall appointments beginning in 2004 and faculty files from the Provost's Office. Data derived from the NSF 12 indicators populate the database. Automated data feeds from other UTEP systems will be performed each fall. The database is encrypted and password protected to secure access of faculty information. All data will be reported in aggregate form.

Data or databases

The UTEP's NSF ADVANCE: Dissemination Matrix

This database is a collection of dissemination activities. It briefly describes the activity, the date, the component responsible for the activity, and the number of individuals involved in the activity. Used as promotional information for the grant.

Promotional materials folder

The UTEP NSF ADVANCE folder promotes initiative through visual logo recognition while serving as a practical means to disseminate UTEP ADVANCE brochures, business cards, promotional materials, and other information.

Used as promotional information for the grant.

D. INTERNET DISSEMINATION

Web site <http://www.utep.edu/advance>

This is the official UTEP ADVANCE Web site.

Web site

<http://www.dmc.utep.edu/mentoring>

This is the official Web site for the Faculty Mentoring Program for Women.

IV. CONTRIBUTIONS

A. CONTRIBUTIONS WITHIN DISCIPLINE

The UTEP ADVANCE team members continue to present on the UTEP ADVANCE initiative at their professional society meetings, thereby contributing to the general knowledge base. The complete list is provided in Appendix J. A few of the more significant contributions made within the disciplines are listed below:

Dr. Gates, presented “How to Navigate the Tenure Process,” at the Academic Workshop for Underrepresented Participants, Texas A&M College Station, September 2005.

Dr. Witherspoon presented "Communicating Leadership: The Next Generation," at the National Communication Association annual convention, November 2005.

Dr. Witherspoon presented “Conflict and Mediation” at an Emerging Leader workshop at New Mexico State University, January 2006.

Dr. Posey and Ms. Renner presented “Focusing the Lens on Women Faculty Issues: Three Years of ADVANCE at the University of Texas at El Paso” at the American Society for Engineering Education annual meeting, June 2006.

B. CONTRIBUTIONS TO OTHER DISCIPLINES

Following is a list of UTEP ADVANCE contributions to other disciplines of science and engineering at the national level:

Dr. Gates stepped down as a UTEP ADVANCE Co-PI to serve as PI on another NSF grant to create the Computing Alliance of Hispanic Serving Institutions. The core purpose of the Alliance is to create a unified voice and to consolidate the strengths, resources, and concerns of Alliance institutions committed to increasing the number of Hispanics who pursue and complete baccalaureate and advanced degrees in computing areas.

The Alliance institutions include California State University-Dominguez Hills, Florida International University, New Mexico State University, Texas A & M University - Corpus Christi, University of Houston Downtown, University of Puerto Rico - Mayaguez, University of Puerto Rico - Rio Piedras, University of Texas El Paso.

The structure of the Alliance creates a community of organizations that can be more effective in instituting change by providing consolidated direction for initiatives that address the underrepresentation of Hispanics in computing. The Alliance structures interaction with industry and other organizations that support its goals. This includes the Hispanic Association of Colleges and Universities (HACU), the Computing Research Association (CRA) and its Coalition to Diversify Computing, National Center for Women and Information Technology, GEM Consortium (a national consortium for graduate degrees for minorities in Engineering and Science, and the NSF ADVANCE programs at UTEP and NMSU.

C. CONTRIBUTIONS TO EDUCATION AND HUMAN RESOURCES

Following is a list of UTEP ADVANCE contributions to human resource development at the national level:

PI Evelyn Posey, Co-PI Tine Reimers, and former Coordinator, Kelly Andronicos, authored a chapter on mentoring entitled “A Faculty Mentoring Program for Women: Building Collective Responsibility for Developing a Highly Qualified Faculty” for the book *Advancing Women in Science and Engineering: Lessons for Institutional Transformation* to be published by the Michigan Press.

The joint development with New Mexico State University of a brochure to disseminate information about opportunities for dual career couple hires continues to serve as a model of university collaboration to promote ADVANCE goals.

Dr. Witherspoon was selected to be a teacher in a short-course on leadership education at the convention of the National Communication Association in November 2006.

Dr. Witherspoon served as a manuscript reviewer for Sage Publications evaluating a volume on leadership discourse in spring 2006.