

Feedback on Progress Implementing
A Framework to Foster Diversity at Penn State: 1998-2003
College of Engineering
Final Report

The College of Engineering has had a long-term commitment to creating and maintaining a welcoming, supportive and diverse community. The College's initiatives to support women in traditionally male-dominated fields are well developed, similar initiatives to support multicultural individuals are somewhat less so, and there is no mention of attention to LGBT issues in the report. **RESPONSE: *The College of Engineering is committed to providing a welcoming climate that respects individuals throughout the spectrum, and includes all aspects, of diversity, including but not limited to race, ethnicity, gender, age, sexual orientation, physical ability, religious affiliation and veteran's status. Concerning multicultural and gender aspects, specifically, the Minority Engineering and Women in Engineering Programs, both founded almost two decades ago, have continued to set the standard for other institutions in regard to innovative research and programming to understand and address the historical under-representation of women and minorities in the engineering field. In order to more fully exploit the intersections in the mission, goals and initiatives of these programs, we have recently reorganized to bring the programs more closely together under the leadership of a Director of Engineering Diversity. The Multicultural and Women Engineering programs will continue as two distinct stems and programming emphases, but will be positioned to take better advantage of synergies and best practices, as well as to collaborate in administering to the broader dimensions and aspects of diversity and educational equity in the College.***

Challenge 1: *Developing a Shared and Inclusive Understanding of Diversity*

- ❖ No real definition of diversity is given under this Challenge. It would be advantageous to present a strong definition of diversity at the start of the document to establish a context for discussion of the College's diversity initiatives. **RESPONSE: *It is true that the College of Engineering has traditionally articulated its diversity statements in terms of "operational" goals, such as effective recruitment and retention, educating engineering professionals for a diverse and pluralistic society, and assessing and addressing climate issues in the College. We agree with the benefits of presenting a definition of diversity, and to follow up this recommendation, the College is working on developing a new statement. A draft version will be prepared by the College's Diversity Task Force for review and comment from the Academic Council, Faculty Council, advisory boards, students and staff during the early part of the fall semester.*** Also, the College may wish to expand its focus to include additional diversity aspects beyond gender and race/ethnicity. **RESPONSE: *Within the U.S., women, African Americans, Hispanics and Native Americans continue to be particularly underrepresented in engineering higher education and the profession. We remain committed to effective investments and aggressive programming in recruitment and retention to address this issue, and will continue to emphasize broader diversity aspects throughout the educational offerings and experiences in the College.***
- ❖ The World Class Engineer (WCE) initiative, which emphasizes the importance of diversity in producing highly effective engineers, is infused throughout the College.
- ❖ The Women in Engineering Program (WEP) and Multicultural Engineering Programs (MEP) demonstrate the College's significant commitment to diversity.
- ❖ The recent climate survey for students, faculty, and staff is a positive step in emphasizing diversity in the workplace and classroom.

Challenge 2: *Creating a Welcoming Campus Climate*

- ❖ The WESAC listserv provides information and access for women students. This successful initiative could be adopted by MEP. **RESPONSE: *The recent reorganization described above will assist in the sharing and transfer of successful initiatives to all constituents and stakeholders in the College.***
- ❖ The Student Activity Center demonstrates a commitment to empowering students through leadership opportunities, fulfillment of affiliation needs, and professional development.
- ❖ The Campus College Connection Program is a best practice that provides a link and support for underrepresented Engineering students starting at locations other than University Park.

Challenge 3: Recruiting and Retaining a Diverse Student Body

- ❖ The College offers many successful programs addressing pre-college outreach, recruitment, and academic support and retention. Successful WEP programs could be expanded to meet the needs of MEP students. **RESPONSE: As noted above, the expanded collaboration and synergy between the MEP and WEP programs, afforded by the recent organization, will enhance the ability to extend successful programming.**
- ❖ The Society of Women Engineers was noted as one of the largest and most active student groups in the College.
- ❖ Retention activities seem to be focused largely on the first year. The College might consider emphasizing retention efforts beyond the first year. **RESPONSE: The emphasis of retention-related programming on the first year is by design as this is when the most attrition occurs, and strategic interventions at this early juncture are most critical to students' perseverance in engineering. The new Campus College Connection Program, while beginning with a specially-designed bridge program for incoming students, also features significant follow-up programming during the subsequent two years of study. Focusing on students' successful transition from the Campus Colleges to University Park and into the majors, the 4-week Academic Summer Enhancement (ASE) program held at University Park is only the kick-off to a sustained effort that includes intensive mentoring, campus visits and other transitional activities throughout the next two years. The Academic Assistance Center and student organizations such as SWE, NSBE, SHPE and AISES provide tutoring, mentoring, academic support activities, community building and leadership opportunities for students at all levels to keep them engaged and progressing in their studies. Programming through the Multicultural and Women Engineering Programs emphasizes academic success strategies, resume writing, career preparation and other topics of interest and importance to students in the lower and upper division stages, and the College of Engineering scholarship program offers support for students from the first year through graduation.**
- ❖ Scholarship support is noteworthy.

Challenge 4: Recruiting and Retaining a Diverse Workforce

- ❖ The College's percentage of women faculty continues to increase (14.3% in 2003), well above the national average (8.3%), and is the highest among the top 25 engineering colleges. The College's number of multicultural faculty has grown at a slower rate. College multicultural faculty numbers rank seventh among the top 25 engineering colleges with 4.7 percent, compared to a national average of 3.5 percent. Attention could be given to focusing on recruitment of underrepresented U.S. minorities as well as international faculty. **RESPONSE: The College does have recruitment of underrepresented U.S. minorities to the faculty as a key priority. We hope to sustain the success achieved in a very competitive environment that has resulted in the addition of four African-American faculty members over the last two years. In regard to international faculty, it is noted that over 100 of our 283 tenured and standing faculty, as well as four of twelve department heads, are foreign-born. We welcome the diversity that this brings to our teaching, research and administrative ranks.** Little emphasis was placed on recruitment and retention initiatives for staff. Information on the outcomes of such efforts would be helpful. **RESPONSE: Recruitment of staff has been addressed largely through the normal University HR procedures. In its diversity planning, the College has proposed the strategic allocation of funds for pre-hire visits or relocation/moving expenses in order to attract diverse candidates from a broader geographic area and/or urban regions for selected staff positions. The primary, and very successful initiative directed toward staff retention is the Peer Review of Exceptional Performance (PREP) program. This creative program provides a mechanism for significant promotions within grade through a merit-based, peer-reviewed process.**

Challenge 5: Developing a Curriculum That Supports the Goals of Our New General Education Plan

- ❖ First Year Seminars attention to cross cultural learning such as MEP's "Success 101" is positive. It is unclear exactly how WEP's "Toy FUNDamentals" meets this objective.

RESPONSE: Enrollment in this seminar is "gender balanced" to counter the tendency for isolation of the female students in a class that is predominantly male, especially in a project-oriented course involving student teams. Also, because the central theme of the course is to have students go to a pre-school to watch children at play and then to design a new toy based on their observations, it represents an ideal setting to introduce incoming engineering students to the idea of design criteria for different cultural characteristics, gender-based interests, learning styles and other "customer" preferences.

- ❖ Career development courses and research opportunities are positive.
- ❖ Gender-balancing and clustering of students within courses demonstrates insight into the dynamics of the learning experience.

Challenge 6: Diversifying University Leadership and Management

- ❖ The new Academic Council provides access to the dean and information exchange across programs.
- ❖ The Engineering Administrative Fellows Program has been successful in preparing women for leadership positions.

Challenge 7: Coordinating Organizational Change to Support Our Diversity Goals

- ❖ Commitment to MEP and WEP, including expansion of staff, creation and expansion of the Office for Student Services, and MEP Academic Excellence Center, is commendable.
- ❖ The College of Engineering has demonstrated excellent support from external constituents for various diversity services and programs.