# 2006-1232: MARKETING ENGINEERING THROUGH OPEN MENTORING® - A WEB-BASED PILOT PROGRAM

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# Marketing Engineering through Open Mentoring®: A Web-based Pilot Program

# Abstract

#### Paper Overview

This paper provides an overview of the Open Mentoring® program in the College of Engineering at The University of Texas at Austin (UT Austin), which evolved from collaborative efforts between Triple Creek Associates, Inc. and College of Engineering programs such as the Women in Engineering Program (WEP) and the Equal Opportunity in Engineering (EOE) Program. Research on Open Mentoring® and Web-based mentoring will be shared. In addition, marketing strategies employed to engage female and minority engineering students and to showcase a multitude of engineering career paths will be discussed. An overview of pilot program activity, including mentoring topics and participant demographics, will be provided.

# Background

The WEP and EOE Programs at UT Austin are in the second year of developing, managing and expanding a College-wide, Web-based, easy-to-use mentoring tool called Open Mentoring®, licensed from Triple Creek Associates, Inc. By marketing engineering options and showcasing the career paths of College of Engineering alumni through Open Mentoring®, WEP and EOE strive to increase student knowledge about career planning, as well as increase the retention and graduation rates of participating female and minority engineering students.

The College of Engineering at UT Austin prepares students to enter the workplace with competence and confidence by providing them with opportunities such as Open Mentoring® to develop into independent, creative professional engineers. The Web-based Open Mentoring® process guides a student through:

- assessing her/his development needs,
- finding a suitable mentor from a dynamic database of College alumni, and

• creating a mentoring agreement to initiate and monitor the mentoring relationship. The process is mentee-driven; mentees initiate contact with mentors and the negotiation of the mentoring relationship. WEP and EOE promote the College's Open Mentoring® program through information sessions, electronic communications and networking events.

# Organizations' Backgrounds

WEP connects pre-college and college students to opportunities and careers in engineering and introduces them to mentors, peers and resources in the field. Established in 1992, the mission of WEP is to increase the overall percentage of women in the College of Engineering at UT Austin. Women currently comprise 22 percent of the UT Austin engineering student body.

The EOE Program was established at UT Austin in 1970 to promote the recruitment, retention and academic development of students from underrepresented ethnic groups interested in pursuing engineering careers. Since that time, EOE has expanded its goals and now seeks to increase the diversity of its student body by supporting students who have backgrounds or experiences that will contribute to the overall diversity of the College of Engineering. Underrepresented ethnic groups currently comprise 17 percent of the UT Austin engineering student body.

Triple Creek Associates, Inc. is the vendor chosen to partner with the College of Engineering to pilot the Web-based mentoring program. Triple Creek's mission is to support clients with the technology and expertise to build relationships, leverage knowledge, and create inclusive environments for the purpose of improved individual and organizational success. They provided the College of Engineering with a customized version of Open Mentoring® and direct end user support.

# Introduction

Open Mentoring® was launched at The University of Texas at Austin (UT Austin) in August 2004 to provide students with the opportunity to initiate and manage mentoring relationships based on individual need. Mentoring in the College of Engineering was developed to address the following challenges: (1) need to increase the number of student graduates with degrees in engineering; (2) large percentage of students with limited exposure to professional engineers in industry; (3) large percentage of engineering students with limited knowledge about career opportunities in engineering. More than 18,500 alumni and 7,500 undergraduate and graduate students in the College of Engineering have been introduced Open Mentoring®. Open Mentoring® provides students with the opportunity to seek guidance on academics, professional development, jobs, companies, career planning and leadership roles through mentoring relationships with engineering alumni and practicing engineers. In addition, Open Mentoring® enables UT engineering alumni and industry friends to give back to the College of Engineering while making a difference in the lives of students.

The goals and objectives for Open Mentoring<sup>®</sup> include the following: (1) provide students with the opportunity to seek guidance through a mentoring relationship; (2) enable students to review and select mentors who have relevant skills and experience; (3) empower students to initiate and terminate a mentoring relationship; (4) increase student knowledge about career options in engineering; (5) increase student satisfaction with their decision to pursue a degree in engineering; (6) increase the number of students who graduate from the College of Engineering at UT Austin.

Through January 2006, nearly 150 students have initiated mentee projects and 370 professionals have created mentor profiles in Open Mentoring®. Mentee projects range from career guidance to real world application. Mentor profiles showcase practicing engineers as well as doctors, lawyers, corporate executives and graduate students.

# **Evolution of Mentoring in Engineering at UT Austin**

Formalized industry-to-student mentoring within the College of Engineering at UT Austin began and grew within the Women in Engineering Program (WEP). WEP developed and managed an in-house industry-student mentoring program from 1992 through 1997 before partnering with MentorNet, a nonprofit electronic mentoring network aimed at promoting the retention of women in engineering, math and science fields. By moving from an in-house program to MentorNet, WEP was able to minimize the human resources required to manage an industry mentoring program and was able to accommodate additional student mentees and industry mentors.

WEP utilized MentorNet until 2002 when WEP began evaluating other mentoring resources and programs. Given the access WEP has to local engineers and alumni and the desire of these people to serve as mentors to UT Austin students, MentorNet was not meeting the needs of WEP's mentoring customers. MentorNet did not provide at that time the flexibility for mentors or mentees to designate characteristics they would prefer in a match such as degree level, major, location, alma mater or industry.

WEP was introduced to Triple Creek Associates and Open Mentoring® through a presentation at the 2002 Society of Women Engineers (SWE) National Conference. An employee from The Dow Chemical Company was describing Dow's Open Mentoring® program. In late 2002, WEP approached other College of Engineering programs and student services seeking additional support to license technology from Triple Creek Associates and customize the Open Mentoring® electronic mentoring tool to meet the needs of all students in the College, not just the female engineering students. After proposing the Open Mentoring® tool to the Dean of the College and receiving approval and funding, customization of the tool moved forward. The Equal Opportunity in Engineering (EOE) Program and the Alumni Relations Program in the College assisted in the customization, along with advisors from the Student Affairs Office and current female and minority engineering students.

The College's Open Mentoring® program was launched in February 2003 as a pilot program with female engineering students targeted as the mentees. The fully-customized version of the mentoring tool was launched in August 2004 to all engineering students and alumni with targeted messages and marketing from the WEP and EOE offices.

# **Mentor Program Partner Backgrounds**

The Women in Engineering Program (WEP) connects pre-college and college students to opportunities and careers in engineering and introduces them to mentors, peers and resources in the field. Established in 1992, the mission of WEP is to increase the overall percentage of women in the College of Engineering at UT Austin. WEP strives to educate girls and women about engineering, inspire women to pursue the unlimited opportunities within the world of engineering and empower women engineers to benefit society. Women currently comprise 22 percent of the UT Austin engineering student body. The WEP Director serves as co-administrator of the College's Open Mentoring® Program.

The Equal Opportunity in Engineering (EOE) Program was established at UT Austin in 1970 to promote the recruitment, retention and academic development of students from underrepresented ethnic groups interested in pursuing engineering careers. Since that time, EOE has expanded its goals and now seeks to increase the diversity of its student body by supporting students who have backgrounds or experiences that will contribute to the overall diversity of the College of Engineering. Underrepresented ethnic groups currently comprise 17 percent of the UT Austin engineering student body. The EOE Director serves as co-administrator of the College's Open Mentoring® Program.

The College of Engineering at UT Austin has consistently remained among the ranks of the country's top engineering schools. The 2006 edition of the *U. S. News & World Report* survey of the country's engineering undergraduate schools ranked UT Austin eleventh in the nation among 350 accredited engineering schools, and sixth among public institutions. With over 7,300 students enrolled in nine undergraduate and 17 graduate programs, the College of Engineering at The University of Texas at Austin teaches and mentors students who will enter the workplace with competence and confidence. The College provides students with the opportunity to develop into independent, creative professional engineers. Mentoring in the College of Engineering facilitates a student's personal and career development through the sharing of known resources, expertise, skills, perspectives and proficiencies by an experienced individual. The Dean of the College of Engineering supports the Open Mentoring® Program through the allocation of donor funding.

Triple Creek Associates, Inc. is the vendor chosen to partner with the College of Engineering to pilot the Web-based mentoring program. Triple Creek's mission is to support clients with the technology and expertise to build relationships, leverage knowledge, and create inclusive environments for the purpose of improved individual and organizational success. They provided the College of Engineering at The University of Texas at Austin with a customized version of Open Mentoring®; monthly support on program enhancement and extension; and direct support to end users, including students, faculty and alumni. A full-service approach such as this enables the College of Engineering and both WEP and EOE to roll out and administrate an extensive program with minimal internal resources.

# The Changing Practice of Mentoring – Utilizing the Web

Three factors moved Triple Creek Associates in the late 1990s to develop Open Mentoring®, a Web-based mentoring and management process:

- 1. The emergence of andragogy as the dominant framework for the development of adult learning processes and programs.
- 2. The emergence of the Web as a primary vehicle of communication and relational networking.
- 3. The need to create mentoring cultures in large organizations where traditional, formal train-and-match programs were too expensive or impractical.

# Andgragogy

Up until the last 20 to 30 years, mentoring as a concept and practice had changed little from the paradigm embodied by Mentor and Telemachus in Homer's *Odyssey*. The very words mentor and protégé connote a senior person guiding a junior person, giving sage advice in an intense relational context. However, this top-down, mentor-driven model is being increasingly challenged as an antiquated foundation for adult learning. In his work *The Modern Practice of Adult Education: Andragogy Versus Pedagogy* (Association Press, 1970), Malcolm Knowles, the modern father of andragogy (adult learning theory), proposes five primary assumptions that should guide adult learning models.

- 1. Adults believe they can make their own decisions, so learning should be self-directed.
- 2. Adults want to contribute to their learning from their own experiences.
- 3. Adults want to learn when it flows from their real-life situations.
- 4. Adults are task-centered and problem-centered, valuing application.

5. Adults learn better when they are internally versus externally motivated.

All of these factors not only point to mentoring as a best practice for adult learning, but highlight a style of mentoring that centers more on learners. Mentoring is becoming more collaborative in conception rather than hierarchical, meaning that mentoring relationships are evolving into partnerships that are developed by agreement rather than by outside authorities. Effective learning occurs best when mentees are free to pursue multiple mentoring relationships based on personal development goals and needs, rather than being assigned a single mentor to help them accomplish to goals of the enterprise. The internal motivation of the mentee needs to be tapped to provide the energy for a transformational relationship.

# Web-based Delivery

Placing the focus on mentees' needs and allowing them to pursue multiple relationships at one time led to the selection of the Web as an ideal delivery and management vehicle for mentoring. It also opens the door to creating mentoring cultures in large or distributed organizations such as universities. Self-directed training and a searchable database create an easy way for mentees and mentors to register their interests and expertise, and then connect in self-directed mentoring relationships. The Web-based environment eliminates antiquated boundaries and creates easier access points for women and minorities who were routinely excluded from social networks where informal mentoring relationships traditionally developed.<sup>1,2</sup> This is especially critical in traditionally white, male-dominated environments, such as technology and engineering.

Further, Web technologies create an ideal way to dialogue and document critical processes in mentoring relationships. Mentees and mentors should work together in a collaborative fashion to develop a living mentoring agreement that manages expectations for the relationship, and Web technologies help them accomplish this. In Open Mentoring®, mentees draft an outline that includes areas of exploration, general goals, relational boundaries, and time issues such as frequency of meeting and anticipated duration for the relationship. This is then discussed, modified and informally ratified by the mentor. The mentoring agreement becomes a living document that helps both parties stay on track and manage expectations. The agreement can change to meet new needs and challenges and gives both parties a way to chart and evaluate progress. It also helps both parties negotiate a healthy conclusion to the mentoring relationship if the goals are met or are changing to the point of a new relationship becoming a better alternative.

# Creating Large Mentoring Cultures in a Cost-Effective Way

Practical and economic realities are the final pressure points that are making Web-based mentoring processes such as Open Mentoring® the new face of mentoring in large or geographically dispersed organizations like universities. Alumni and students can access mentoring training without travel or large time commitments. Additionally, they can connect in productive mentoring relationships without great amounts of administrative time invested in reviewing resumes and making matches. Students can have multiple mentors based on individual needs and timely interests. Program administrators have immediate access to efficient recruiting, surveying and reporting data that enable them to track program expansion and effectiveness. In short, effective mentoring programs for hundreds or even thousands of people can be run for the time and money expended on formal mentoring programs that involve only dozens of participants. Web-based mentoring, with robust administrative tools and built on a

mentee-centered philosophy, is fast becoming the new face of mentoring in the for-profit and non-profit arena.

# **Program Overview**

Mentoring in the College of Engineering facilitates a student's personal and career development through the sharing of known resources, expertise, skills, perspectives and proficiencies by an experienced individual. The College of Engineering's Web-based mentoring process guides a student through: (1) assessing her/his development needs; (2) finding a suitable mentor from a dynamic database of alumni and friends of the College; (3) creating a mentoring agreement to guide the mentoring relationship.

Initially, students seeking a mentor are directed to the College of Engineering current student services Web page for "Mentoring" located at www.engr.utexas.edu/current/services/mentoring/. On this Web page, students receive information about the College's philosophy on mentoring and a brief explanation on the involvement and time commitment required for Open Mentoring®. In addition, students are introduced to the rules of engagement and expectations for Open Mentoring® participants. Once the student agrees to follow the rules of engagement, he/she will enter the Open Mentoring® portal at

http://www.3creekmentoring.com/COE\_UTAustin, select Mentee Login, and create a new user account and project name. The complete cycle for mentee projects includes three stages: (1) establish a Mentoring Agreement; (2) monitor the mentor relationship; (3) close the mentor relationship. Table 1 provides an overview of the three stages in Open Mentoring®.

Stage	Activity						
1. Establish	Determine Needs						
	Select learning descriptions						
	Define goal statements						
	• Define areas that you are willing to share with a mentor						
	Define confidentiality ratings						
	• Describe accountability (areas/skills where you will make progress)						
	• Define ratings for accountability feedback						
	• Determine a schedule for meeting and a duration for the relationship						
	• Select the level of mentoring you need						
	Review Mentoring Agreement						
	Find a Mentor						
2. Monitor	Mentees and mentors periodically review their progress and rate how well						
	the relationship is meeting their needs, based upon the Mentoring						
	Agreement.						
3. Close	Mentees and mentors complete short closure surveys that capture data on						
	how effective the relationship was.						

Table 1. Open Mentoring® – Overview of Stages.

# Stage 1 – Establishing a Mentoring Agreement

The first stage is designed to help the mentee define the project, as well as identify a mentor with relevant experience. This process begins with identifying learning descriptions that best fit the focus of the mentoring relationship. Mentees are asked to select a minimum of five learning

descriptions from a list of 48 that fall under the following categories: (1) career options; (2) professional development; (3) soft skills; (4) personal development. Next, the mentee is required to generate goal statements that clarify the purpose and objectives for the mentoring relationship. In order to establish boundaries and maintain confidentiality, the mentee identifies areas that he/she is willing to share with the mentor, such as current experiences, relationships with peers, study habits and career aspirations. In addition, the mentee selects levels of confidentiality for each area so the mentor knows in advance how the mentoring relationship will proceed. In effort to measure effectiveness and success, the mentee selects areas that he/she intends to make progress on as a direct result of the mentoring relationship. The mentee also decides on the appropriate degree of feedback and how it will be shared. For example, the "mentee will keep the mentor informed on progress" or the "mentor will give recommendations to the mentee based on observations of performance." Finally, the mentee describes the ideal meeting schedule for the mentoring relationship. The mentee is free to share preferences for each of the following: (1) overall duration of the mentoring relationship; (2) frequency of meetings; (3) specific meeting day/time; (4) method of interaction (face-to-face, email, chat, and/or phone). Upon completion, the input data is summarized and a Mentoring Agreement is generated online for the mentee to review. The Mentoring Agreement includes five sections: (1) Goals; (2) Boundaries; (3) Accountability; (4) Scheduling; (5) Level of Mentoring. If necessary, the mentee can go back to previous screens and modify any of these sections.

Once the Mentoring Agreement is finalized, the mentee is connected to a database filled with mentor profiles. The Open Mentoring® search engine identifies and ranks potential mentors based on the compatibility of the mentee's Mentoring Agreement with the mentors' profiles. In addition, mentees can narrow the search for a specific mentor by using keywords and the "Advanced Sorting Options" function. Prior to entering a mentor relationship with one mentor, the mentee has the option of sending interview questions to several prospects. Once the mentee has narrowed the search down to one mentor, he/she will use Open Mentoring® to send a formal invitation to the preferred individual. The prospective mentor will have the opportunity to review the Mentoring Agreement and proceed with one of the following three options: (1) accept the Mentoring Agreement as is and enter the mentoring relationship; (2) propose modifications to the Mentoring Agreement and send it back to the mentee for approval before entering the mentoring relationship; (3) decline the invitation to enter in a mentoring relationship. Upon mutual approval and acceptance of the Mentoring Agreement, the mentor and mentee begin communicating outside of Open Mentoring® portal using the preferred methods of interaction (face-to-face, email, chat, and/or phone). Open Mentoring® provides the mentee with an option to terminate the mentoring relationship at anytime throughout the duration of the project.

# Stage 2 – Monitoring the Mentor Relationship

The mentoring relationship is monitored periodically during the duration of the project. An automatic email, generated by Open Mentoring®, is sent to the mentee inviting him/her to log into the Open Mentoring® portal to evaluate satisfaction levels with the mentoring relationship and progress toward goals stated in the Mentoring Agreement.

#### Stage 3 – Closure Session

As the project duration comes to a close, Open Mentoring® sends a final email to the mentee inviting him/her to log into the Open Mentoring® portal to complete a final evaluation. This

Closure Session requires the mentee to rate satisfaction levels with the mentoring relationship and the mentee's progress toward goals stated in the Mentoring Agreement. In addition to rating satisfaction levels and progress toward goals, this closure session requires the mentee to select of the following three options: (1) stop mentoring; (2) create a new project with the existing mentor; (3) create a new project with a new mentor.

# Marketing Strategy: Engagement of Mentors and Mentees

# Monthly Email

Each semester, four Open Mentoring<sup>®</sup> emails are sent to undergraduate and graduate students in the College of Engineering. The first email is designed to introduce the benefits of Open Mentoring<sup>®</sup> and encourage the students to create a project and secure a mentor. The second through fourth emails are sent to remind students about Open Mentoring<sup>®</sup>, encourage them to make progress and provide suggested topics for discussion. Emails sent during the second, third and fourth month of the semester include a message tailored for students in one of the following three categories: (1) mentee with project but no mentor yet; (2) mentee with projects and in negotiation with a mentor; (3) mentee with project and a mentor. College of Engineering alumni and industry friends receive one email per semester, inviting them to serve as a mentor. At the conclusion of the semester, professionals who created mentor profiles in Open Mentoring<sup>®</sup> activity that semester.

# **Open Mentoring®** Postcards

Two sided Open Mentoring® Postcards provide brief instructions on how students can secure a mentor and how professionals can volunteer to be one. Open Mentoring® Postcards are available in every department and student division office for distribution to students during walk-in visits. In addition, the Women in Engineering Program and Equal Opportunity in Engineering Program distribute Open Mentoring® Postcards to students who attend student development workshops.

# Open Mentoring® Workshops - Get Connected for Career Advice & Networking

Open Mentoring<sup>®</sup> Workshops are offered twice during each semester. The Engineering Career Assistance Center endorses Open Mentoring<sup>®</sup> by promoting the workshop on their Web site and through email communication. The objective of the workshop is advertised as follows, "Get connected to a doctor, lawyer, corporate executive, graduate student, recent graduate or an engineer at your favorite company with Open Mentoring<sup>®</sup>! Learn to use this Web-based tool to investigate career paths, jobs, companies and leadership roles. Seek help with resumes, interview skills, leadership skills and more. This interactive and demonstration-based workshop will provide students with tips on securing the best mentor and ideas on how to create a successful mentoring relationship. The College's Open Mentoring<sup>®</sup> tool will be showcased, providing students with a glimpse of their networking possibilities."

# **Program Administration**

# **Collaborations**

Program administration of the College of Engineering's Open Mentoring® Program is a collaborative effort aimed at providing the greatest resources to student mentees and industry and alumni mentors without significantly increasing the responsibilities and time investment of College staff. Through the partnership of the Directors of the Women in Engineering Program

(WEP) and the Equal Opportunity in Engineering (EOE) Program, Open Mentoring® has been made available to all engineering students and promoted to all engineering alumni. Both Directors serve as Co-administrators for the College's Open Mentoring® Program, sharing responsibilities in marketing, reporting, troubleshooting and process improvement.

College partnerships enhance the administration and expansion of the Open Mentoring® Program. Through partnerships with the College of Engineering Alumni Relations Team, alumni are regularly communicated with about Open Mentoring® opportunities and program participation. Sharing information on the program and marketing materials with Departmental and College advisors and administrators helps market the program to students interested in a mentoring relationship. Presentations to Department Chairs and Advisory Boards have initiated both interest amongst alumni and industry representatives to serve as mentors and interest in mentoring to become a part of certain coursework. Discussions with the Engineering Career Assistance Center have led to Open Mentoring® being marketed as a career development program with networking and career enhancement opportunities. The partnership between WEP and EOE has ensured that female and minority engineering students receive targeted messages and continuous invitations to participate in the Open Mentoring® Program.

# Continuous Improvement

Both the College of Engineering and Triple Creek Associates work to continuously improve the Open Mentoring<sup>®</sup> Program and tool. Triple Creek Associates upgrades the Open Mentoring<sup>®</sup> tool regularly, seeks continual feedback from customers and enhances the administration of the program by the WEP and EOE Directors. Monthly teleconferences between Triple Creek and the College of Engineering ensure that the program is progressing and that tool updates and enhancements are understood and utilized.

The WEP and EOE Directors meet annually to plan and improve the marketing, reporting and training for the Open Mentoring® Program. The plan includes both the process for targeting female and minority engineering students through WEP and EOE initiatives in addition to marketing to all engineering students through various means. During this annual meeting, program participation by the WEP and EOE target audiences is assessed and areas for improvement are brainstormed.

# Funding

Funding for the Open Mentoring<sup>®</sup> Program is provided by donors to the College of Engineering. The Dean of the College of Engineering designates the specific funding sources each year for the annual license fee paid to Triple Creek Associates, appealing to the interest of alumni interested in supporting mentoring programs for students. The Dean fully supports the program knowing that through Open Mentoring<sup>®</sup> the College is able to engage alumni and enhance the education and career development of engineering students, two activities of great interest to College of Engineering individual and corporate donors.

# **Program Activity**

The Open Mentoring® Program has been active within the College of Engineering since August 2004. To date, there have been 147 mentees and 369 mentors participating in the program. Mentees are automatically placed in four groups according to gender (male and female) and

ethnicity (minority and non-minority). Participation and project data for the College's Open Mentoring® Program between August 2004 and January 2006 can be found in Table 2.

	Mentor Selection Stage	Negotiation Stage	Monitor/Fully- Engaged Stage	Closure Stage	Completed Projects	Total Projects	Total Mentees
All Mentees	91	4	30	0	1	126	147
Minority Females	8	0	1	0	0	9	8
Minority Males	6	0	6	0	0	12	15
Non- Minority Females	32	2	8	0	0	42	47
Non- Minority Males	44	2	15	0	0	61	77

Table 2. Mentee Projects and Groups.

Mentees are evenly spread across all classifications: 23% first year undergrads, 20% second year undergrads, 23% third year undergrads, 15% fourth year or more undergrads, 18% graduate students. All departments within the College of Engineering have students participating.

Mentee projects range from career guidance to real world application. Topics students are seeking mentors for include the following:

- Architectural Engineering Through the Eyes of a Professional
- Succeeding as a Chemical Engineering Graduate
- What's next after graduation?
- Using Engineering to Move Into the Business World
- Entrepreneurship Starting a Company
- What is the "real world" like for an engineer?
- Why mechanical engineering?
- Engineers Practicing Medicine
- To Be or Not To Be an Engineer
- General Engineering & Career Guidance
- What do electrical engineers do?

The 369 mentors represent a wide variety of locations, engineering disciplines and career levels. A majority of the mentors are Texas residents (67%) with 23% local Austin residents. Mentors self-identified themselves according to their current position within their field as follows:

- 44% individual contributors
- 12% supervisors
- 16% mid-level managers
- 9% senior managers
- 10% executives

• 8% senior executives

A majority of mentors have 10 or more years of experience:

- 15% 1-3 years' experience
- 20% 4-6 years' experience
- 14% 7-9 years' experience
- 15% 10-14 years' experience
- 10% 15-19 years' experience
- 27% 20 and more years' experience

With only two percent of the College of Engineering student body currently participating in the program and an excess of mentors available, the goal for the future is to reach 10 percent of the student body (700 students) and increase the available mentors to match the need of the students.

# **Future Enhancements**

Both the College of Engineering and Triple Creek Associates are continually working to enhance the program and the tool to better serve customers. Through various enhancements to the Open Mentoring® tool and to the marketing and administration strategies of the program, the College of Engineering hopes to reach the 10 percent student body involvement goal by the end of the 2007-2008 academic year.

# **Open Mentoring® Tool**

Since the inception of Open Mentoring® in the College of Engineering, marketing of the program and tracking of participants has been a more labor-intensive exercise with downloads of participants requested from Triple Creek Associates, manual sorting and demographics assessments and multiple email documents for marketing and program communications. Triple Creek Associates has recently enhanced the administration area of the Open Mentoring® tool enabling administrators to submit queries to assess participants, and to manage marketing and promotion through online email, planning and tracking systems. By integrating the College's marketing and communication plans into the new tools available from Triple Creek Associates, participant engagement should be enhanced and non-participant communications should be more targeted. Both of these improvements should encourage participants to move forward through the mentoring process aiming for project completion and should encourage non-participants to engage in the Open Mentoring® Program.

# Campus Expansion

The license agreement with Triple Creek Associates covers The University of Texas at Austin site, thus allowing additional colleges and programs to join the program with limited additional costs. The College of Natural Sciences has expressed interest in participating in the Open Mentoring® Program, providing the tool as a resource to their students, industry volunteers and alums. Through additional customization of the tool to incorporate majors and career interests of Natural Science majors, the Open Mentoring® Program at UT Austin will be a joint effort of both Colleges. By joining forces, this will provide additional mentoring resources for students of both Colleges, enabling students to find mentors that better meet their needs whether the mentors are focused in engineering or science, two fields very similar in scope and opportunity.

# Curriculum Inclusion

Given that students have a variety of interests and activities and that career development is often a "just-in-time" need for them, the Open Mentoring® Co-administrators are seeking ways to incorporate the program into the curriculum so that students will be required or encouraged to seek out mentoring relationships to either answer coursework problems or to provide guidance in various engineering or career-related issues. The Co-administrators have reached out to College of Engineering Department Chairs and Department Advisors, seeking input and ideas for expansion and marketing to students. In the future, professors and administrators involved in teaching technical communications, introductory engineering courses, senior design courses and First-year Interest Group seminars will be approached with ideas for course inclusion. Through the integration of Open Mentoring® into the classroom, more students will be required to participate, which will hopefully lead to more students becoming familiar with the tool and seeking mentors for their own developmental needs in the future.

#### **Online** Tutorials

An online tutorial using Macromedia Captivate will enable students to preview the Open Mentoring® tool and to gain insights into the matching process. Macromedia Captivate enables onscreen actions to be recorded and creates a Flash simulation that will be incorporated both into the mentoring Web page on the College of Engineering's Web site and into the Engineering Career Assistance Center's Web site to promote Open Mentoring® as a networking resource. By utilizing online technology, students may access the demonstration and introduction at any time and become familiar with the Open Mentoring® tool prior to beginning the process.

#### **Summary**

Open Mentoring® in the College of Engineering at The University of Texas at Austin provides students with the opportunity to initiate and manage mentoring relationships based on individual need. With Open Mentoring®, students can seek guidance on academics, professional development, jobs, companies, career planning and leadership roles through mentoring relationships with engineering alumni and practicing engineers. Through partnerships with the Women in Engineering Program (WEP), the Equal Opportunity in Engineering (EOE) Program, the College of Engineering and Triple Creek Associates, Inc., over 7,500 undergraduate and graduate students have been invited to explore their engineering options through the Web-based and nearly 150 have taken advantage of the opportunity through January 2006. Both the WEP and EOE Directors serve as co-administrators of the College's Open Mentoring® Program and market the program to female and minority engineering students through student development events, targeted emails and, in the future, through online training tools and required courses. Through future enhancements to the program and continued marketing efforts promoting the tool, the College aims to have 10 percent of enrolled students participating in a mentoring relationship. By marketing engineering options and showcasing the career paths of College of Engineering alumni through Open Mentoring®, WEP and EOE strive to increase student knowledge about career planning, as well as increase the retention and graduation rates of participating female and minority engineering students.

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