

**AC 2008-2716: WOMEN IN ENGINEERING CAREER DAY CONFERENCE: A  
RECRUITMENT TOOL FOR MASSACHUSETTS HIGH SCHOOL GIRLS**

**Regina Middleton, University of Massachusetts, Amherst**

**Shelly Perdomo, University of Massachusetts Amherst**

# WOMEN IN ENGINEERING CAREER DAY CONFERENCE: A RECRUITMENT TOOL FOR MASSACHUSETTS HIGH SCHOOL GIRLS

## Abstract

It is no surprise, like many other Research I institutions, the University of Massachusetts at Amherst is experiencing an under representation of women in the field of Engineering. Although women comprise 50% of the undergraduate student body, only 14% of female students are enrolled in the College of Engineering. In an effort to recruit and retain young women within the field of engineering the Women in Engineering Program and the Society of Women Engineers (SWE) UMass Amherst Collegiate section conducts an annual career day conference. Attracting over 250 female 9-12<sup>th</sup> graders, this program provides young girls with the opportunity to explore engineering as a possible academic track and or career choice by providing hands on team projects, interactive activities, display tables from industry and presentations by female engineers. Last year's career day program, 94.8% of the students stated that they gained new knowledge about engineering, 63.9 % stated that they would consider a career in engineering. What are some of the factors accounting for this success? What are some of the challenges that we continue to face? This paper will discuss accomplishments and challenges faced by institutions seeking to outreach to underrepresented constituencies.

## Introduction

The under representation of women in the field of engineering is not a new phenomenon to research. The imbalance of men and women appears most dramatically in computer science, information technology and engineering [1]. In the case of Massachusetts, "with respect to gender, the state reflects the national trends with 58% of young adults in college comprised of women. However, on a national scale only 12% of students choosing to major in computer science/IT were women, while in the state of Massachusetts this was 9%" [2]. "In engineering the comparable percentages were 15% nationally and 13% in the state of Massachusetts" [2]. The need to dramatically attract women to STEM (science, technology engineering and mathematics) fields of study, particularly engineering, is apparent. So the question remains, how do we address this challenge?

In 2006, the Legislature and Governor of Massachusetts approved an additional \$ 4 million for the STEM Pipeline fund [1]. The STEM Pipeline fund was created in 2004 as a tool to strengthen and nurture Massachusetts' STEM talent as a way of ensuring that the Commonwealth remains a vibrant competitor in the global economy [3]. With respects to increasing the number of students who participate in programs that support careers related to science, technology, engineering and mathematics, a number of college and universities continue to employ outreach programs as a recruitment tool to attract women into STEM fields.

In 1983 the College of Engineering at the University of Massachusetts Amherst established the Women in Engineering Program, to encourage women to consider careers in engineering. The specific program's objective includes recruitment and retention of women students and establishment of an alumnae network. The program is involved in supporting a number of activities, among them a student collegiate chapter of the Society of Women Engineers, which provides scholarships and gives awards to outstanding women engineering students. Some other

activities consisted of Dress for Success workshops, how to navigate a conference, dinner etiquette workshops, engineering speaker series, tutoring programs, and a “Girls Scouts Day” held in conjunction with the University of Massachusetts Amherst collegiate chapter of SWE (Society of Women Engineers) which hosted over 45 young girls and exposed them to the field of engineering through interactive activities. There is no question that, a strong commitment to diversity has been and continues to be a top priority in the College of Engineering at the University of Massachusetts Amherst. Committed to making every possible effort to recruit and retain more women, outreach programs have been vital to raising awareness and recruiting women into the field of engineering.

According to Anderson and Northwood (2002) outreach programs are considered a possible solution towards recruiting K-12 girls, particularly high school female students, into fields that are overwhelmingly male dominated [4]. What makes outreach programs so appealing to K-12 schools is the emphasis on hands-on experience of science and engineering [4]. Currently, 50% of the total student body, at the University of Massachusetts Amherst, is comprised of women [5]. In spite of this representation, female students continue to be underrepresented in non-traditional fields like engineering. Enrollment statistics completed by Engineering Workforce Commission for the period of 2005 shows that 17% of female students enrolled in engineering programs [6]. As it currently stands, the percentage of women enrolled at University of Massachusetts, Amherst is 14% which is slightly below the national scale of 17% [6]. Despite the increase in intervention strategies of outreach and summer bridge programs for girls [4], there is still a need to promote engineering concepts to students in middle and high school levels. Recognizing the importance and success of outreach programs in attracting and recruiting women into engineering, for 24 years the Women in Engineering Program at the College of Engineering at the University of Massachusetts Amherst, has hosted an annual Women in Engineering (WEP) High School Career Day Conference to increase enrollment of female constituencies.

Since its inception, more than 3,500 young women from across 100 different high schools from the state of Massachusetts have taken part in this one-day conference. By providing an overview the Women in Engineering Career day Conference, this article will serve to highlight the accomplishments and unique qualities of this activity, while discussing continued challenges. Surveys were conducted and open ended questions were asked of parents, teachers, guidance counselors, industry members and students who took part in WEP Career day. Results will be shared along with other factors shaping the recruitment of women into the field of engineering.

## **Background**

In accordance to the National Science Foundation’s goal of recruiting and retaining more female students in engineering, WEP Career day was designed to increase the interest and attract female high school students into the field of engineering. Launched in 1983, the Women in Engineering (WEP) High School Career Day conference continues to function as an outreach program sponsored by the College of Engineering’s Women in Engineering Program at the University of Massachusetts Amherst, in conjunction with the collegiate section of the Society of Women Engineers (SWE) of the University of Massachusetts Amherst. This program is targeted to female high school students’ grades 9-12<sup>th</sup> to provide them with the opportunity to explore

engineering as a possible academic track and career choice. The purpose of this one day conference is to expose female high school students from the state of Massachusetts to an array of cutting edge science and engineering topics and activities that will excite, inspire and encourage young women to consider engineering and technical fields as possible future career choices. Moreover, it serves as a way to influence female high school students' to take math and science courses in preparation for college. Teachers, guidance counselors, parents and students alike, learn about the benefits/rewards of an engineering career at the post secondary level.

The funding for WEP Career Day conference has been generously provided by the College of Engineering and their partnerships with industry and alums of the College and Women in Engineering Program. As a major support program of the College of Engineering's Diversity Programs Office (DPO), DPO's Women in Engineering Program has raised over \$100,000 annually to promote opportunities to recruit and retain females in the field of engineering. In line with the College of Engineering mission statement, the DPO is committed to promoting and executing outreach programs aimed at recruiting and retaining women and students of color enrolled at UMass Amherst. As a recruitment tool, the Women in Engineering High School Career day Conference has served as a successful educational and socialization program for perspective female students and parents.

Several factors are attributed to the success of this activity; timely advertisement of program to high schools, legacy of program, an increase in parental involvement, alumni support and participation and financial contributions from the College of Engineering and our Industrial Advisory Council (IAC). One unique component of the Women in Engineering Program is our Industrial Advisory Council of the College of Engineering. The IAC is made up of 20 industry members and alums who provide insight and guidance with regards to programming and recruiting underrepresented students into engineering. Our advisory council has also been instrumental in identifying industry members to be involved in activities such as WEP Career Day Conference. The commitment and dedication from our IAC members has definitely contributed to the success of the program.

## **Conference Structure**

The Women in Engineering Program (WEP) High School Career Day Conference is a one-day program offered to over 200 high school girls grades 9<sup>th</sup>-12<sup>th</sup> who are interested in learning more about the field of engineering. Since its inception, the conference has been built with an emphasis on empowering women to reach their full potential. This objective is achieved through involvement in hands-on activities, exposure to female undergraduate students, instruction by female faculty and panel discussions with female undergraduate alumni.

Prior to hosting the conference, an invitation letter and registration packet is mailed to the Guidance Counselor, Math and Science teacher of each high school in the state of Massachusetts in early August. To ensure that the aforementioned high school practitioners have ample time to recruit interested female high school students, August was designated as the best month to conduct the massive mailing to high schools.

The conference program is formatted to include a welcome from the Associate Dean of the College of Engineering, followed by a brief introduction to the field of engineering, the distinct types of engineering disciplines, and the benefits of women in engineering. Because many young women do not think that they are competent in math and science due to the lack of encouragement from their teachers and peers, many enter university and college campuses disinterested in engineering. Throughout the years, the Women in Engineering Program have taken the aforementioned statement into consideration and have included the following components, which underpin the Women in Engineering Career Day Conference. The general conference structure between 2005 through 2007 consisted of the following:

- **Keynote Speaker:** In 2007, a successful female engineering alumna who is the CEO of Banneker Industries addressed attendees about her experiences as a Black female engineer and shared her secrets to success.
- **Networking:** Between 2005 and 2007, activities were designed to get students to interact with other students, undergraduate female role models and industry female engineers. Students, parents, guidance counselors and/or teachers were divided up into color-coded groups to provide ample time for students to ask questions of and mingle with industry members, engineering students and faculty members who were present at the display tables and/or sessions. Participants also took advantage of breaks in the program to view industry displays and network with undergraduate students who have engaged in undergraduate research experiences.
- **Research Experience:** Every year undergraduate male and female engineering students are invited to share their research projects and poster presentation of their research undergraduate experience to illustrate how students have the opportunity to construct knowledge while getting paid and work closely with Engineering Professors.
- **Role Models and the Engineering Profession:** A tradition of the conference has been to provide role models to current engineering female students and prospective students. We provide this service by hosting an annual alumni panel within the conference. The alumni panel consists of recent female engineering graduates, now working full time in various engineering companies, who are invited to return to their alma mater to provide perspective female engineering students with the opportunity to not only hear about their experiences as female engineers, but it provides students, parents, guidance counselors and/or teachers with the opportunity to ask the panelist candid questions about their past and current experiences as engineers.
- **Industry Interactive Displays:** Engineers from Raytheon (attended every year), Tighe and Bond (attended in 2005 and 2007), Verizon (attended in 2007), MIT Lincoln Laboratories (attended 2007), General Dynamics (attended in 2005 and 2006), Sensata (attended in 2006), Westinghouse (attended in 2006), CDM (attended in 2006) and Intel (attended in 2005) are a few of the companies that have sent industry members to serve as role models. At least five to eight companies attend WEP Career day every year and

bring interactive displays. Among the equipment on display at past events of this kind were infrared cameras, radar systems and space suits.

- ***Department/ Student Interactive Activities:*** In 2005 and 2006 students participated in a variety of mini workshops that were active and informative. The workshops were designed to expose female students to various engineering majors. Students, parents, guidance counselors and/ or teachers were divided up into smaller groups to take part with interactive hands on activities that included grocery propelled vehicles, building towers and bridges out of drinking straws and masking tape or becoming “hydro-neers” by creating water-filtering systems from common household items. Parents, guidance counselors and/or teachers observed as students engaged in a hands on learning experience. In 2007 an interactive component with a research oriented perspective was implemented. Unlike previous years where break sessions were overwhelmingly hands on., in 2007 Engineering Faculty and current students led the sessions that consisted of the CASA Weather Detection, Driving Simulator, Environmental Water Quality, Products for the Blind and Engineers without Borders.
- ***Admission and Financial Aid:*** Every year, tables with admissions and financial aid information are displayed in order to provide prospective female students and their parents with information on admissions and financial aid procedures of the University of Massachusetts, Amherst.
- ***Campus Tour:*** Tours are an optional component of the program that are offered to students, parents, guidance counselors and/or teachers who wish to see and learn more about the campus and its facilities. This tour is offered every year as part of the conference program.
- ***Student Volunteers:*** Volunteers for WEP Career Day was comprised mainly of female engineering students in the College of Engineering, alumni panelist and women engineers from industry. This is particularly important as it provides female high students, parents, guidance counselors and/or teachers with the opportunity to ask questions of the experience of current engineering students.

A debriefing session is conducted every year to celebrate accomplishments and to implement recommendations made by those who have participated.

### **Conference Evaluation**

To assess the program’s effectiveness, every year WEP Career day participants, parents, counselors and/or teachers complete an evaluation at the end of the conference. Components of the evaluations addressed knowledge of engineering, breakout sessions, panel discussion and engineering major concepts (Refer to Appendix A, Evaluation 2005 and 2006, Appendix B, Student Evaluation 2007 and Appendix C, Counselor Evaluation). The evaluations explored perceptions of engineering as a career, current grade level and choice of engineering as a major. Feedback from the participants and counselors was positive. Approximately, 92 (88%) female students completed the evaluation in 2005; 155 (66%) female students in 2006 completed the

evaluation and 115 (62%) female student completed the evaluation as well as 22 counselors completed the evaluation in 2007. The evaluation included some structured and open ended questions. Data presented in this study focused on our most recent WEP Career days that took place between 2005 and 2007. For the year of 2008, 130 women currently enrolled in the College of Engineering at the University of Massachusetts Amherst were polled as a follow up to determine if attending Career day influenced their decision to attend the College of Engineering at UMass Amherst. Data was entered and compiled in an excel spreadsheet for organizational purposes.

## **Data Collection**

The primary purpose of this study was to evaluate the effectiveness of WEP Career Day and examine it as a possible model for success in recruitment of female students in the field of engineering. Furthermore, this study will also explore and assess the perceptions of female students and high school counselors of the WEP Career Day at UMass Amherst. The data collected from this study is based on completed student and counselor/teacher evaluations.

The student evaluations focused on five areas of interest; grade decision, appraisal of breakout sessions, knowledge about engineering and career choice of engineering. The counselor's evaluations focused on their perceptions of keynote speaker, student panel, breakout sessions, company display table, career day expectations and recommendations of career day to others UMass Amherst were tabulated for developing the analysis profile.

In addition, an email was distributed to poll currently enrolled female students to determine whether attending one or more Career Days influenced their decision to study engineering at the College of Engineering at the University of Massachusetts Amherst.

Descriptive statistics using frequencies and percentages were compiled to answer research questions posed in this study.<sup>1</sup>

## **Initial Results**

### ***Student Evaluations***

Figure 1 indicates that in 2006, 236 students participated in WEP Career Day, 2007 was the second largest attendance at 185 and in 2005 there were approximately 105 participants.

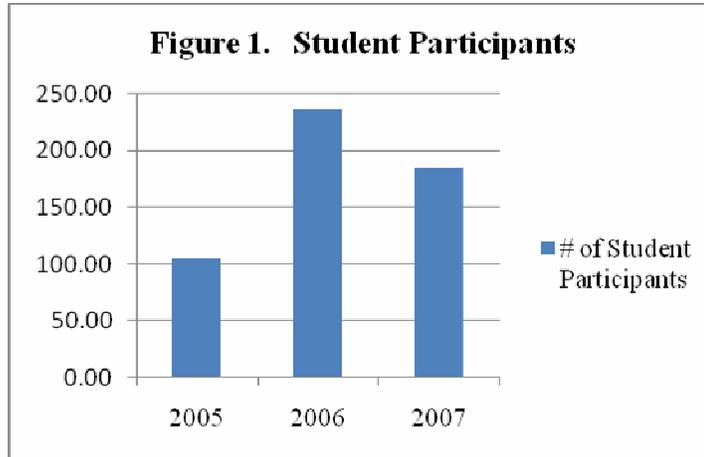


FIGURE 1  
STUDENT PARTICIPATION

Figure 2 displays the responses relating to grade level of female participants. Results indicate that 45% of female participants in 2005 were in the 11<sup>th</sup> grade of high school. The second leading grade level was 12<sup>th</sup> grade 40% in 2006 and approximately 15 % of females participants were in the 9<sup>th</sup> grade level in 2005 and 2007. One percent of female students were in the 7<sup>th</sup> and 8<sup>th</sup> grade level in 2007.

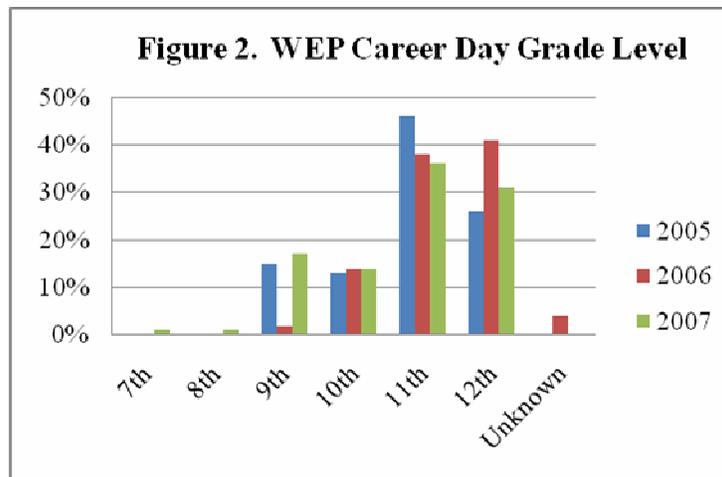


FIGURE 2  
GRADE LEVEL

With regards to programs and student's perceived value, figures 3 and 4 best represent students' perceived benefit of activities conducted in WEP Career day.

Figure 3 indicates that in 2005 and 2006, 89% of female participants felt that the hands-on projects and student projects was excellent. In both years, 90% of student participants indicated that the student panel and company tables were excellent.

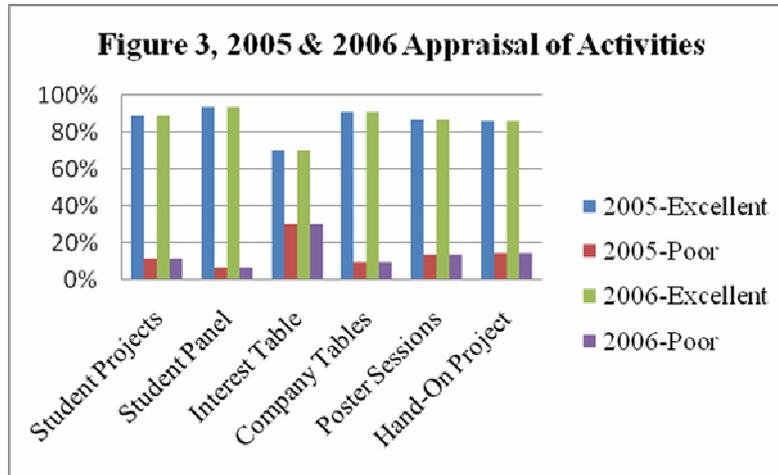


FIGURE 3  
2005 & 2006 APPRAISAL OF ACTIVITIES

Figure 4 presents data pertaining to the program structure of 2007 WEP Career Day. Responses showed that 95% of female participants felt that the keynote speaker and student alumni panel was excellent. It is evident that this was the most useful segment of the WEP Career Day 2007. Although a number of students' agreed that hands on breakout sessions were excellent in 2005 and 2006, in the 2007 conference program breakout sessions were changed to include research based presentations by current engineering faculty and industry members to provide participants with real life situations/issues that engineers tackle. Poster Sessions were removed to provide ample time for the keynote address. In the 2007 conference program interest tables were available, but were not evaluated due to changes within the conference program.

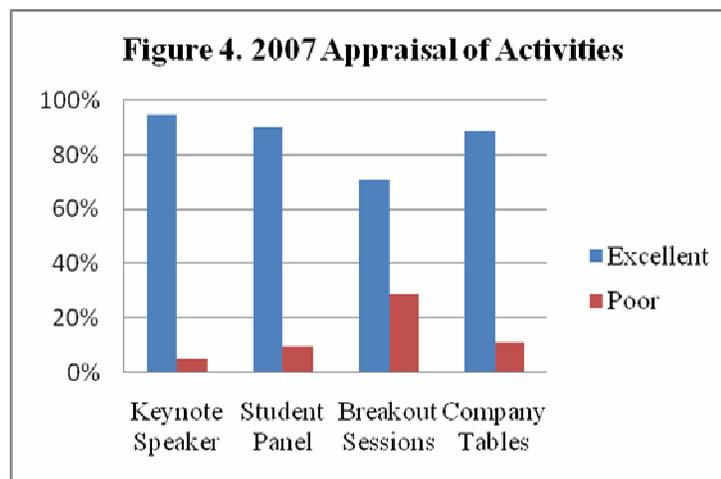


FIGURE 4  
2007 APPRAISAL OF ACTIVITIES

Responses illustrating how much the WEP Career Day created an interest in the field of engineering are evident in Figure 5. The data revealed that in 2005, most 80% of female participants felt that the program increased their awareness, while 90% in 2006 indicated that it increased their awareness. Slightly less than 10% felt knowledgeable of the field of engineering.

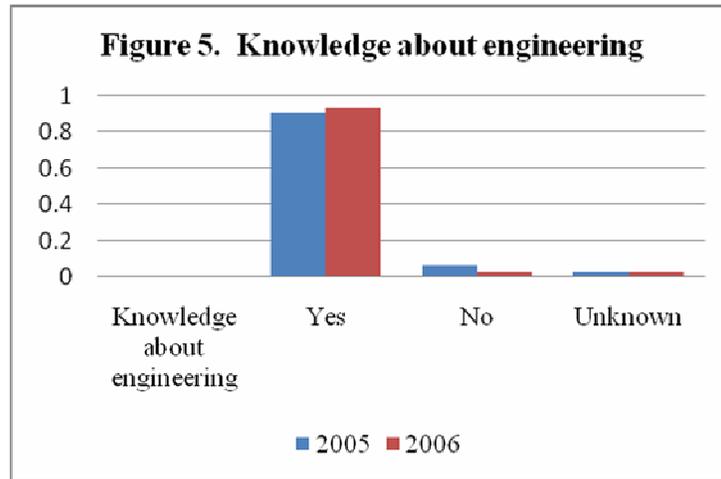


FIGURE 5  
KNOWLEDGE ABOUT ENGINEERING

Figure 6 reveals the extent of the impact of the WEP Career Day's effectiveness on increasing female students' interest in the field of engineering as a possible career choice. Ninety percent agreed that they would consider engineering as a career choice in 2007. In contrast, for the years of 2005-06 the responses remained similar at 60% of female participants considering engineering as a career choice. Furthermore, in 2005-2006, 20% of student female participants were unsure about engineering as a choice of major. Whereas, 2007 showed a response rate of 10% of female participants who didn't considered engineering as a major.

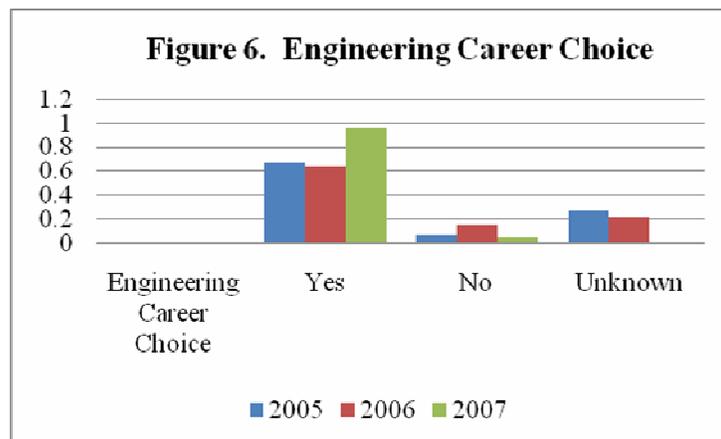


FIGURE 6  
ENGINEERING CAREER CHOICE

Data relating to students who plan on attending UMass Amherst are provided for the year of 2007 in figure 7. Seventy percent of these female participants indicated that they plan on attending UMass Amherst. About 30% of these respondents reported that they didn't plan on attending UMass Amherst. This information was important to document because part of our new initiative with the WEP Career day Conference is to determine whether students who attended the activity do in fact attend the College of Engineering at the University of Massachusetts Amherst. This information is not evident for the previous years of 2005 and 2006.

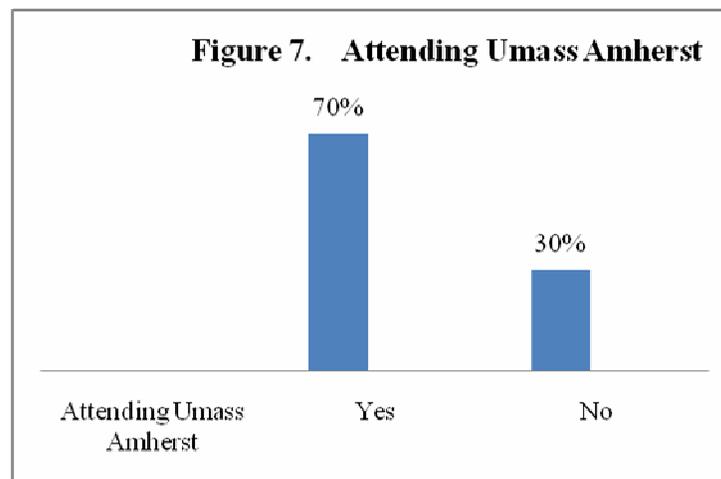


FIGURE 7  
ATTENDING UMASS AMHERST

During the year of 2008, 156 female students were asked if ever attending WEP Career Day influenced their decision to study engineering at UMass Amherst College of Engineering. Approximately 23 students responded to the email survey. Eight (35%) of the female engineering students indicated that they attended the WEP Career Day and it influenced their decision to study engineering at UMass Amherst College of Engineering. However, 15 (65%) of the students reported that they did not attend the WEP Career Day, but other recruitment activities influenced their decision to attend UMass Amherst College of Engineering; some of which included: open house, learning communities (Residential Academic Programs), campus tours and high school teachers' recommendations.

### ***Counselor Evaluations***

When asked, what aspects of the programs counselors perceive to be beneficial to female participants, figures 8 through 10, best illustrate the responses from 22 counselors who attended the WEP Career Day 2007

Figure 8 indicates that 90% of the counselors felt that the keynote speaker was excellent. About 70% believed the student panel and company tables were beneficial to their students.

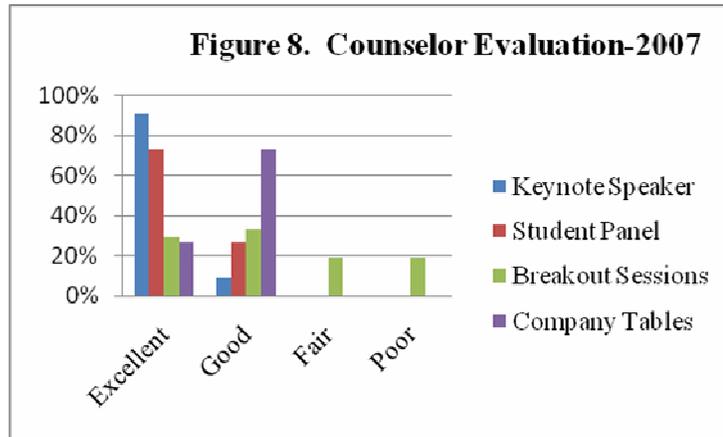


FIGURE 8  
COUNSELOR EVALUATION

In response to meeting the counselors expectation in Figure 9, the majority of respondents, 90% indicated that the Career Day did meet their expectations and the remaining 10% felt like didn't meet their expectations.

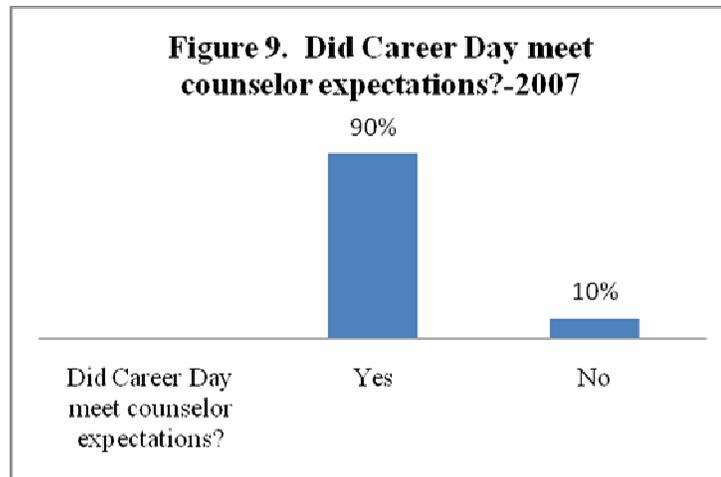


FIGURE 9  
EXPECTATIONS MET

In response to the counselor recommending the Career Day to others in Figure 10, all respondents 100% indicated that they would recommend the program to others for the year of 2007.

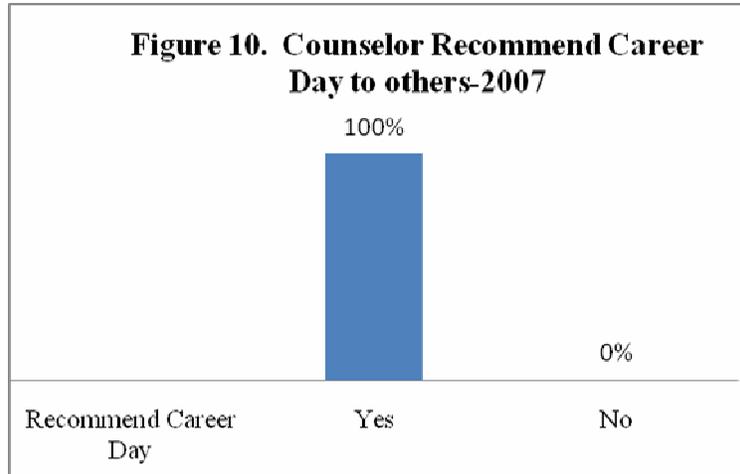


FIGURE 10  
RECOMMEND CAREER DAY

In addition to the quantitative data gathered, some of the general comments about WEP Career Day have been the following:

- “It was a good overall experience.”
- “I had a great time working on the project, it was an opportunity to meet new people and see people’s views on matter.”
- “Today’s presentation helped me further consider engineering as a career.”
- “I feel this school has so much to offer and I feel ahead because of my high school classes.”
- “A wonderful program for women.”
- “The program was amazing and it showed me to stick with engineering.”
- “Love the student panel.”
- “Great speakers.”

### **Conclusion**

The recruitment and retention of women in engineering is a concern of the College of Engineering at University of Massachusetts at Amherst. The College of Engineering employs diverse strategies to recruit female students to achieve the objectives of increasing their interest in the field of engineering. It is clear that to achieve the goal of increasing the amount of women in the field of engineering, more than one approach exists. These include, but are not limited to, open houses, student registered organizations such as the UMass Amherst Collegiate Section of the Society of Women Engineers, Society of Women Engineers Conference, WEP Career Day, Girl Scouts Exploration Day, campus tours and outreach afterschool programs at local and surrounding high schools. Therefore, the WEP Career Day is just one of the many tools the College of Engineering at the University of Massachusetts Amherst uses to recruit women into the field of engineering. As such, this study examined the perceptions of female students and counselors with regards to the effectiveness of WEP Career Day Conference at the University of Massachusetts Amherst.

As a possible tool for success in recruitment of female students in the field of engineering the data provided strengths and recommendations to recruiting women in the field of engineering by examining our WEP Career Day Conference.

An assessment of the WEP Career Day in promoting female students' interest in engineering for 2007 revealed that the most effective sections of the program were the keynote speaker, student panel, company displays, breakout sessions, knowledge of engineering session, engineering major choice, and attending UMass Amherst. The aforementioned points revealed that 95% of students and 90% of counselors indicated that the alumni keynote speaker in 2007 was the most effective tool in creating an awareness of the field of engineering. The keynote speaker provided an insightful perspective about the engineering profession as well as personal reflection of the life of engineering students. In terms of recruitment, this session provided students and counselors with a positive professional role model that provide insightful information about the field of engineering, while simultaneously discussing a myriad of career opportunities within engineering.

The panel discussion, which was comprised of female engineering alums who are now employed with engineering companies, served as yet another recruitment method. Approximately, 90% of students in 2005-07 and 70% of counselors in 2007 indicated the student panel and company display tables were excellent. The panel discussion and company displays were an effective way of disseminating information about the field of engineering from a student and a professional perspective. This created awareness and provided firsthand exposure to students and counselors about engineering; while simultaneously marketing their company products and services.

Eighty nine percent of female participants in 2005-06 and 70% in 2007 felt that the hands-on project breakout sessions served as an excellent opportunity to explore engineering curricula, activities and labs. Although a direct impact towards recruitment is difficult to assess, one can speculate that the hands-on projects served as a means of getting female students interested in the field of engineering.

Another recruitment goal was met through the increased knowledge of the field of engineering as a result of Career Day. The majority of students (80%) in 2005-06 indicated that this program increased their knowledge and awareness of the field of engineering. Our recruitment goal was met by exposing students to engineering curricula, concepts, faculty and students.

A strong indicator of the increased interest of women in engineering was evident when 90% of students in 2007 indicated that they would consider engineering as a career choice. Contact was made with high school counselors and students to expose them to our campus community, engineering fields of study and industry partners. In addition, basic engineering demonstrations, concepts and discussion were used as a recruitment tool.

An essential component of the program, to track for recruiting purposes, was to ask students if they planned to attend UMass Amherst College of Engineering after participating in WEP Career Day. The data revealed that 70% of student participants in 2007 plan to attend UMass Amherst College of Engineering. However, only two students who participated in the 2007 WEP Career

Day will be attending the College of Engineering in fall 2008, showing that much improvement is still needed.

Finally in 2008, 35% of women currently enrolled in engineering at UMass Amherst attended one WEP Career Day throughout high school and indicated that WEP Career day influenced their decision to attend UMass Amherst.

As a recruitment tool, WEP Career Day Conference was a success with positive responses from attendees and counselors. Our goal was to attract and promote the field of engineering by collaboration of counselors, industry partners, university faculty and community. Since engineering is not included in a number of middle and high school curriculums, creative efforts were made to expose and motivate potential female students in favoring engineering as a career choice. Although we felt the program was a success, we offer the following recommendations for developing similar programs, as a result of the WEP Career Day evaluation.

1. Disseminate an information card at the end of the WEP Career Day to students to conduct a follow up with seniors throughout the year by contacting them via mail with information regarding our college and informing them of upcoming events and/or open houses.
2. Work closely with high school teachers and counselors by providing recruitment materials such as; contact information, brochures, invitations to open houses, and a calendar of events that would pertain to prospective female students.
3. Conduct a poll of freshmen female students in the First Year Seminar engineering orientation class to determine who actually participated in the WEP Career Day and if it had an influence on their decision to attend UMass Amherst College of Engineering.
4. Contact other universities who have successful engineering Career Day programs to gain a better perspective of the recruitment of women in the field of engineering.

Although we recognize that WEP Career Day is just one of the many tools used in recruitment of female students it can by no means be the only tool used to measure recruitment. With the help of the College of Engineering, faculty, staff, industry partners and alumni our recruiting efforts can be successful.

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<sup>1</sup> Prior to reviewing the section *initial results*, it is important to note that in 2005 and 2006 the program conference remained unchanged. However, in 2007, some innovations were introduced to provide participants with personal narratives and lived experiences of current female engineers within industry and academia. In 2007 the conference program included, for the first time a Keynote speaker and breakout sessions included research based presentations with interactive activities led by Engineering Faculty and Industry members.

APPENDIX A

Women in Engineering Career Day Conference Evaluations  
October 24, 2005 and October 30, 2006

Thank you for taking the time to provide us with information about your perceptions of engineering and your experience at today's program. Your answers to the questions below and your comments are important to us as we plan future events.

Please complete and return this survey to the registration table before you leave today. You will receive a free gift upon completion and return of this survey.

Are you a \_\_\_\_\_ Student \_\_\_\_\_ Counselor \_\_\_\_\_ Teacher?

If you are a student, circle your current grade level: 9<sup>th</sup> 10<sup>th</sup> 11<sup>th</sup> 12<sup>th</sup>

1. Please indicate your appraisal of the following activities presented at today's program by circling the appropriate word.

a.	Students' Projects	Excellent	Poor
b.	Student Engineers' Panel	Excellent	Poor
c.	Admissions, Financial Aid, Honors Informational Material	Excellent	Poor
d.	Company Display Tables	Excellent	Poor
e.	Students' Poster Sessions	Excellent	Poor
f.	Hands-on Engineering Project	Excellent	Poor

2. Please read the following statements and check appropriately.

- a. I gained new knowledge about engineering \_\_\_\_\_ Yes \_\_\_\_\_ No
- b. I am considering a career in engineering \_\_\_\_\_ Yes \_\_\_\_\_ No
- c. I am considering a career in \_\_\_\_\_.

3. Please give us any additional comments you may wish to make regarding today's activities on the back of this survey.

Which high school do you attend? \_\_\_\_\_

If you want information on or are interested in attending the College of Engineering Open House next spring please provide your name and home mailing information below. Please print clearly.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State \_\_\_\_\_ Zip: \_\_\_\_\_ Phone \_\_\_\_\_

APPENDIX B

***Women in Engineering Fall 2007  
Career Day  
Student Evaluation***

October 29, 2007

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Please help us evaluate this year's WEP Career Day and plan for future events. Thank you for your comments and/or suggestions.

Please complete and return this survey to the registration table before you leave today. You will receive a free gift upon completion.

Please circle your current grade level: 9<sup>th</sup> 10<sup>th</sup> 11<sup>th</sup> 12<sup>th</sup>

1. Please circle the appropriate word that best describes your experience with today's program.

a. Keynote Speaker	Excellent	Poor
b. Student Panel	Excellent	Poor
c. Hands-On-Breakout Sessions	Excellent	Poor
d. Company Display Tables	Excellent	Poor
2. Are you considering engineering as a career?
  - a. Yes
  - b. No
3. Are you considering attending UMass Amherst?
  - a. Yes
  - b. No
4. What high school do you attend?
5. What did you like most about the program?
6. What did you like least about the program?
7. How did you hear about the program?

Comments:

If you want information on or are interested in attending the College of Engineering Open House next spring please provide your name and home mailing address below. Please print clearly.

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State \_\_\_\_\_ Zip: \_\_\_\_\_ Phone \_\_\_\_\_

APPENDIX C

*Women in Engineering Fall 2007*  
*Career Day*  
*Counselor Evaluation*

October 29, 2007

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Please help us evaluate this year's WEP Career Day and plan for future events. Thank you for your comments and/or suggestions.

Please complete and return this survey to the registration table before you leave today.

1. Please circle the appropriate word that best describes your experience with today's program.

a. Keynote Speaker	Poor	Fair	Good	Excellent
b. Student Panel	Poor	Fair	Good	Excellent
c. Hands-On-Breakout Sessions	Poor	Fair	Good	Excellent
d. Lunch	Poor	Fair	Good	Excellent
e. Company Display Tables	Poor	Fair	Good	Excellent
2. Did the Career Day meet your expectations?
  - a. Yes
  - b. No, Explain:
3. Would you recommend the Career Day to others?
  - a. Yes
  - b. No
4. What high school do you represent?
5. What did you like most about the program?
6. What did you like least about the program?
7. How did you hear about the program?

Comments:

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