

UT

ETT216

CENTER FOR TRANSPORTATION INFRASTRUCTURE AND SAFETY

Women in Science & Engineering and Minority Engineering Scholarships: Year 3

Report for 2008-2009 Activities

by

Cecilia Elmore

A National University Transportation Center at Missouri University of Science and Technology

Disclaimer

The contents of this report reflect the views of the author(s), who are responsible for the facts and the accuracy of information presented herein. This document is disseminated under the sponsorship of the Department of Transportation, University Transportation Centers Program and the Center for Transportation Infrastructure and Safety NUTC program at the Missouri University of Science and Technology, in the interest of information exchange. The U.S. Government and Center for Transportation Infrastructure and Safety assumes no liability for the contents or use thereof.

Technical Report Documentation Page

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.	
NUTC ETT216			
4. Title and Subtitle Women in Science & Engineering and Minority Engineering Scholarships: Year 3: Report for 2008- 2009 Activities		5. Report Date	
		May 2009	
		6. Performing Organization Code	
7. Author/s		8. Performing Organization Report No.	
Cecilia Elmore		00019515	
9. Performing Organization Name and Address		10. Work Unit No. (TRAIS)	
Center for Transportation Infrastructure and Safety/	11. Contract or Grant No.		
Missouri University of Science and Technology 220 Engineering Research Lab		DTRT06-G-0014	
Rolla, MO 65409			
12. Sponsoring Organization Name and Address		13. Type of Report and Period Covered	
U.S. Department of Transportation		Final	
Research and Innovative Technology Administration 1200 New Jersey Avenue, SE Washington, DC 20590		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract			
Support made scholarships available to minority and women students interested in engineering and science and significantly increased the number of minority and female students that Missouri S&T can recruit to its science and engineering programs. Recipients of scholarships were also to be exposed to career opportunities in transportation.			
17. Key Words	18. Distribution Statement		
Student recruitment	No restrictions. This document is available to the public through the National Technical Information Service, Springfield, Virginia 22161.		
19. Security Classification (of this report)	20. Security Classification (of this page)	21. No. Of Pages	22. Price
unclassified	unclassified	2	

Form DOT F 1700.7 (8-72)

Society of Women Engineers (SWE) National Conference: *October 2008 (National); 10 students; 3 staff

Missouri S&T Society of Women Engineers (SWE) students participated in the National and Regional conferences which are the major events for SWE and one National is one of the largest technical and career conferences for female engineers in the country. Each year, the conference attracts nearly 5,000 engineering professionals, students and corporate representatives. The conference is an opportunity for engineering companies and corporations to recruit top talent from SWE membership. It also provides educational, technical and career opportunities for professional and student engineers. This year Missouri S&T's Women's Leadership Institute and SWE had an exhibit booth at the career fair, designed to attract future female graduate students.

Girls "Lock-In" Conference's (11-12th grade girls) *September 26 – 27, 2008 (31 participants) *March 6 – March 7, 2009 (16 participants)

The conferences gave the students the opportunity to camp out in a residence hall, learn more about studying math, science, and engineering at Missouri S&T, meet other perspective and current students, learn tips for financial aid and admission, and participate in team projects. The conference was designed by students who are members of the Missouri S&T Society of Women Engineers (SWE) and the Women in Engineering and Science Program.

Girl meets Missouri S&T (12th grade girls) *April 5-6, 2009 (0 participants)

(**This program was cancelled this year due to low attendance. There were numerous snow days that affected students abilities to take additional days away from schoolwork, and all who had signed up eventually cancelled because of this. Several girls did reschedule to make individual visits later in April. It will be rescheduled next year.) This 2-day program is a student recruitment event for female high school seniors and transfer students who have been admitted to Missouri S&T but who have not yet made their enrollment deposit and commitment to attend Missouri S&T. Designed to invite, encourage, promote and support female students to enroll as undergraduate students at Missouri S&T. The recruitment event will allow students to see first hand what life as a female engineering or science student entails and to gain insight into the opportunities available for a successful undergraduate career at Missouri S&T. Visiting campus is the best way for students to get a complete picture of Missouri S&T and its programs. Parents will be invited to attend the event with the student. Students will stay overnight in the residential halls and are matched with current female students who will serve as a peer while on campus.

"Expanding Your Horizons... in Math and Science" November 21, 2008 (over 500 participants)

This national program was established by the Math and Science Network in 1976. Missouri S&T implemented the annual EYH conference in 2000 and today has served over 3000 students. Missouri S&T hosted its 7th conference for over 500 young women. This conference is designed to nurture girls' interests in science and math courses and to encourage them to consider science and math based career options such as engineering, computer science, and biometrics. EYH is an invitation for 7th & 8th grade girls to visit the Missouri S&T campus and attend a keynote presentation by a successful women engineer or scientist, participate in hands-on math/science activities, and interact with female students, faculty and practicing engineers and scientists who serve as positive role models.

"girls go green" – 11-12th Grade Girls *July 27 – August 1, 2008 (20 participants)

This live-in week long camp will give students the opportunity to explore career options that help society while protecting the environment. Students will live in a residential hall, meet current students and professors, participate in team projects and field trips, and gain a better understanding of the science and engineering behind a green environment.

Summer Solutions Camp (9-10th grade girls camp)

*June 22 – 26, 2009 (36 participants registered so far)

Summer Solutions Camp is designed to peak the interest of freshman and sophomore high school girls in engineering and science. The one-week program is designed to enable female students to obtain a clear picture of engineering and science as a profession. Several hands on projects are planned to help the students learn more about career options and the demand faced in the fields of engineering, math, and science.

"It's a Girl Thing" – 7th & 8th Grade Girls

*June 8 – 12, 2009 (20 participants registered so far)

The program is designed to enable young female students who will be in the 7th & 8th grades during the 2009-10 school term, to help them obtain a clearer picture of engineering and scientific/technological professions. Students will get an opportunity to explore engineering, math, and science through "hands-on" experience. The sessions include laboratory experience, team engineering projects, and time to interact formally and informally with role models and peers. Students become acquainted with various fields of engineering and science and with the demand faced in these fields by practicing engineers and scientists. Another goal is to acquaint students with the type of effort required for college study.