

CHANGING THE ENVIRONMENT THROUGH STUDENT ORGANIZATION: LEARNING FROM OUR MUSES

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Abstract—At the University of Michigan, the Women in Engineering Office and the Office of Graduate Education hope to use peer relationships to strengthen many of their recruitment and retention initiatives. By supporting the development of an innovative new student organization, Movement of Underrepresented Sisters in Engineering and Science (MUSES), the offices have helped to create a unique academic and social support structure for matriculating women. In its second year, MUSES is a formal dialogue group for graduate women in engineering and the physical sciences.

Index Terms—graduate women, organization, retention, mentorship

MUSES: ORGANIZATIONAL STRUCTURE

MUSES acts as a foundation upon which graduate women of color can build lasting friendships and form a more concrete network within the University of Michigan community. Discussion group meetings are an integral part of achieving this organizational mission. Although loosely structured, these meetings are centered around an invited guest who helps to spark the exchange by talking about their personal experiences in academia. Within the confines of these gatherings, MUSES members voice concerns that cannot be broached elsewhere. The dialogue group is an arena for celebration, encouragement, and action.

The issues addressed during group meetings have included:

- The Tenure Process: Discussions with Recent Doctoral Degree Recipients
- Investing on a Graduate Budget
- Nutrition and Stress Management
- Stephen Covey's Seven Habits of Highly Effective People

Discussion topics are designed to battle the feelings of isolation and academic vulnerability that often plague graduate women of color. Additionally, the group provides opportunities for its members to prepare for post-graduate life by facilitating contacts with faculty and staff.

The link between faculty and graduate women is an important component of the second organizational thrust, mentorship. In an environment, like the College of Engineering, where images of success are so extraordinarily limited, productive connections between women of color at all levels must be premeditated. MUSES is a forum within which faculty can meet, counsel, and guide their younger counterparts as they struggle to become contributing members of the scientific community.

In addition to reaching out to those above them on the academic ladder, MUSES women have also committed themselves to extending a hand to those who are looking upwards from the step below. Each graduate member is asked to select a "little sister" within their department who would also like to participate in group discussions/social activities. Lil' MUSES must express interest in graduate/professional school and be classified as juniors or seniors.

THE ROLE OF THE WOMEN IN ENGINEERING OFFICE AND THE OFFICE OF GRADUATE EDUCATION

The Women in Engineering (WIE) Office and the Office of Graduate Education (OGE) are the cohesive forces largely responsible for the organization's birth and survival. Aside from assuming the financial burdens of the group, individuals within these two offices work jointly to direct MUSES leadership and act as an administrative advocate for its members. Being housed under these bodies legitimizes this student-run entity and connects MUSES with the other programs and resources under their umbrella.

The association between MUSES, the WIE office, and the OGE is also critical for recruitment of potential members. As points of first contact for new students, the WIE office and the OGE are uniquely positioned to direct graduate women of color to the dialogue group. Student involvement with the organization and their reliance on the support that it provides can, therefore, begin even before they walk onto campus for the first time.

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Graduate Retention Discussion

YEAR TWO: TRIUMPHS AND DISAPPOINTMENTS

MUSES

Many of the successes of the organization are intangible and/or seemingly modest. These small triumphs over the daily discouragement that accompanies failures in the laboratory and in the classroom have a collective power, however, that is immeasurable. Since the organization's inception only two years ago, there are already telling signs of its benefits.

- Nine of the ten women pursuing a Ph.D. continue to move toward the terminal degree - 67% of these women having been at the University of Michigan for three years or less.
- Since the birth of the organization, six MUSES have passed departmental qualifying exams, one having also reached candidacy, which requires completion of a preliminary research proposal and examination. Additionally, the most senior member anticipates defending her dissertation this semester.
- One hundred percent of the African-American graduate women in engineering participate in the organization.

The accolades of its members are a further testament to the accomplishments of the group.

"MUSES helps you to understand what other minority women have to deal with in the academic world. It [MUSES] let's you know that you're not alone."

Tameika Franklin, M.S. Mechanical Engineering 2000

"I believe MUSES is a wonderful support network in which women can express their innermost feelings and relate their graduate experiences with one another. In particular, I enjoy the opportunity to meet minority women who are pursuing careers in academia. This group is one of the only opportunities that I have had to discuss the struggles and triumphs of minority women in academia. For this reason, I am grateful for MUSES."

Tershia Pinder, Pre-Candidate Mechanical Engineering

The organization is not without its weaknesses, however. MUSES' greatest challenge has been lessening the divide, which in Ann Arbor is both geographic and academic, between women in the physical sciences and those in engineering and other applied fields. Building both a stronger reputation on campus and stronger ties with individual departments may help to eliminate this obstacle. Like its counterpart in the College of Engineering, the newly created Office of Graduate Studies and Research in the College of Literature, Science, and the Arts will be an important vehicle for promoting interdisciplinary membership.

LIL' MUSES

The success of the mentoring component, Lil' MUSES, has been more limited than that of the parent discussion group. The most active of the mentees attends every joint meeting, has been a part of the organization for two years, and has recently applied to a University of Michigan graduate program. Overall undergraduate participation is poor, however.

During the 2001-02 academic year, several remedies will be implemented. MUSES will target younger women, helping them to explore graduate school options and make the transition to advanced degree programs. Incentives for relationship building will also be planned, such as rewards for social/academic competition between paired mentors and mentees. Linking Lil' MUSES with a more formal program directed by the WIE office or the Minority Engineering Program Office (MEPO) will ensure that the younger women will make the time commitment necessary to reap the benefits of the mentor/mentee bond.

CONCLUSION

MUSES has proven to be a valuable resource for women of color in engineering and the physical sciences. As the organization continues to develop, so also will its power as a retention tool. As MUSES continues to grow, so also will its ability to connect and encourage women of color at all academic levels.

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