A PLACE OF HER OWN? STRATEGIES FOR SUPPORTING GRADUATE WOMEN OF COLOR

Michelle Butler[1] and Kim Lewis[2]

Abstract—*The woman of color's academic development can not be separated from her emotional and spiritual journey. Graduate women of color need support structures that recognize the interconnectivity of all facets of their lives. Positioned precariously at the intersection between race and gender, traditional organizations do not fully reach out to her. Within gender-focused organizations, this student is asked to tolerate cultural isolation. Within race-based entities, she must silence her discussion of the challenges associated with being a woman in a male-dominated profession.*

Administrative bodies that direct programs for women and underrepresented minorities in engineering and science can easily create "spaces of affirmation" for women of color, but only as long as they recognize that organizational efforts can not force these women to draw lines in the sand between their racial and gender identities. At the University of Michigan, the Movement of Underrepresented Sisters in Engineering and Science (MUSES) has been used to address this complex retention problem. A formal dialogue group for graduate women in engineering and science, MUSES is the only forum in which attention to the multidimensional struggles of Black and Latina/Chicana women is paid.

This interactive discussion will explore the need for initiatives focused specifically at women of color in technical fields from both a student and an administrator's perspective. Facilitators will use MUSES as a template for the development of mentoring and community building strategies that meet the often ignored needs of this unique group of graduate women. Proposed solutions will tackle the issues that exist when race and gender overlap.

Index Terms—women of color, graduate, retention, strategies

INTRODUCTION

Underrepresented graduate women continually struggle with the dual burden of overcoming both sexism and racism, particularly within nontraditional fields like engineering and science. The academic performance of these women is, therefore, bolstered tremendously by mentorship and relationship building that can only occur within the confines of organizations and programs that provide "complete" support. Institutionally-directed retention tools can be implemented more efficiently if administrators recognize that, in the lives of these women, the responsibilities of gender and ethnicity are intricately interwoven. This facilitated discussion group will focus on identifying support strategies that meet the unique needs of this important subset of the academic population.

THE WOMAN OF COLOR - A VOICE IGNORED

In the classroom and laboratory, the cultural barriers that underrepresented women encounter can be insurmountable. The polar opposite of most of her colleagues, the competitive climate of the academy clashes with her holistic picture of self. For her, organizational and family roles are more important than individualism. Because of her contrasting worldview, the woman of color must constantly shield herself against misconception and devaluation of her work [1]. This unceasing battle can leave her worn and alienated—ill-equipped to overcome the demands of scientific research. "The trauma is both public and private—public as we are perceived and responded to as a monolithic, publicly constructed phenomenon; private because our essence is so antithetical to the Western environment that many times our private selves are reconstructed to survive" [2].

The impact of the dichotomy between the woman of color's strengths and the qualities mandated by the academy has been largely ignored by researchers. In the 1985 National Study of Black College Students, researchers concluded that the academic performance of Black women in graduate school is contingent on criteria not traditionally included in quantitative models [3]. Blake-Beard notes that in both the mentoring and gender literature the voices of women of color have been excluded and unacknowledged—the voices of white women being assumed to represent those of all women. The absence of the underrepresented woman

[1] Michelle Butler, University of Michigan, Ann Arbor, 113 IST, 2100 Bonisteel Boulevard, Ann Arbor, Michigan 48109-2102, mmeredit@engin.umich.edu
[2] Kim Lewis, University of Michigan, Ann Arbor, 2477 Randall Lab, 500 East University Street, Ann Arbor, Michigan 48109-2102, kimml@engin.umich.edu

from the literature is a startling indicator of the inability of academia to recognize and place value on her unique struggles. The woman of color must identify herself along racial or gender lines in order to find a place in the research canon.

Statistical studies of students matriculating towards advanced degrees can also camouflage the connection between race and gender. Hidden beneath the numbers, however, is a significant retention and recruitment problem. The enrollment gap between women in different ethnic groups is severe evidence of the magnitude of this growing recruitment dilemma. According to studies conducted by the National Science Foundation (NSF), in 1999 there was a 53% difference between the number of White and Asian women and the number of underrepresented women attending graduate school in engineering and science [5]. Similarly, the failure of colleges and universities to retain women of color is revealed by statistics that show the number of students moving from undergraduate to graduate school in engineering and science. Statistics collected by the NSF for 1998 show that while the number of degrees awarded to women in science and engineering decreased significantly for all ethnic groups, the decrease is most dramatic for underrepresented groups. Additionally, the number of women belonging to underrepresented groups who matriculated from the Bachelor of Science Degree to the Ph.D. was approximately two times less than the number of White women and Asian students who chose the same educational path [6].

THE NEED FOR SOLUTIONS

Although acknowledgement of the gap between underrepresented women engineers and scientists and their counterparts is critical, the retention of women of color requires an immediate and diverse array of organizational solutions. Traditional strategies do not completely meet the needs of this group. Even student organizations that foster strong networks of peer mentorship have difficulty approaching the distinct problems of the woman of color. Women of color often remain outsiders in these forums. Within male-dominated groups they are reluctant to approach subjects, like romantic relationships and family issues, that because of their gender socialization constantly plague them. Within gender-based organizations they are unable to justify the distance between themselves and the "women first" ideals espoused by their white female colleagues.

"Blackness and femaleness ensures that we can never be them… experience tells us we occupy our own space: sometimes at the margins of all that goes on around us…" [7]. This feeling of "otherness" is the most convincing argument for the development of retention programs aimed specifically at underrepresented women. Innovative social support structures are imperative for the success of graduate women. Hamilton's study of twelve African-American PhDs is a testimony to this need. Using individual and group interviews, she identified six major themes that were important throughout these women's journey through graduate school. Among these were the importance of personal relationships, the presence of racism and sexism, and the need for improved mentoring.

MUSES - A TEMPLATE

At the University of Michigan, the dialogue group Movement of Underrepresented Sisters in Engineering and Science (MUSES) is an important model of the impact of narrowing the focus of student organizations on matriculating women in engineering and the physical sciences. The only forum on campus in which attention to the multidimensional struggles of Black and Latina/Chicana women in engineering and the physical sciences is paid, the organization empowers graduate women of color. In this forum, members can build lasting friendships and form a more concrete network of support. Important arenas for celebration, encouragement, and action, discussion group meetings are an integral part of achieving this organizational mission. Within the confines of these gatherings, MUSES members can tackle concerns that cannot be broached elsewhere. Discussion topics are designed to battle feelings of isolation and academic vulnerability. Additionally, the group provides opportunities for its members to prepare for post-graduate life by facilitating contacts with faculty and staff. MUSES women have also committed themselves to extending a hand to those who are looking upwards from the step below. Each member is asked to select a "little sister" within their department who would like to participate in additional teambuilding and mentorship activities. Lil' MUSES must express interest in graduate/professional school and have achieved at least sophomore standing [9].

The impact of this new organizational focus has been immediate. The group has grown remarkably, doubling its membership since its inception in 1999. MUSES has also provided unique opportunities for the professional advancement for its members. Despite marriage, childbirth, and the everyday failures associated with research, most of its members continue to advance aggressively towards the terminal degree. These women have become increasingly productive, valued contributors to the university community, assuming roles as student leaders and as commanders of their own academic progress and classroom environment.

WEPAN DISCUSSION SESSION STRUCTURE

During the conference brainstorming session, participants will develop creative ways, like MUSES, to build support structures for graduate women of color. Scenarios depicting

the personal experiences of the graduate student moderators will be used not only to introduce the need for these remedies, but also to spark discussion within groups. Discussion will be directed by three key concepts: mentorship, empowerment, and harmo ny. Attendees should leave the session with a set of readily implemented strategies for retaining these women in hand.

ACKNOWLEDGMENT

REFERENCES

[1] Baraka, J. Nefta, "Collegiality in the Academy: Where Does the Black Woman Fit?" in *Black Women in the Academy: Promises and Perils* Lois Benjamin Ed, University Press, Gainesville, Florida, 1997, pp 236-245.

[2] John, Beverly, "The African-American Female Ontology: Implications for the Academe" in *Black Women in the Academy: Promises and Perils* Lois Benjamin Ed, University Press, Gainesville, Florida, 1997, pp 53-63.

[3] Matthews, Westina, Jackson, Kenneth, "Determinants of Success for Black Males and Females in Graduate and Professional Schools " in *College in Black and White: African American Students in Predominately White and Historically Black Public Universities* Walter R. Allen et al. Eds, State University of New York Press, Albany, NY, 1991, pp 197-208.

[4] Blake -Beard, Stacy D, "The Costs of Living as an Outsider Within: An Analysis of the Mentoring Relationships and Career Success of Black and White Women in the Corporate Sector" *Journal of Career Development* Vol. 26, No. 1, Fall 1999, pp 21-35.

[5] *Graduate Students and Postdoctorates in Science and Engineering Fall 1999,* Detailed Statistical Tables Division of Science Resource Studies of the National Science Foundations

[6] *Science and Engineering Degrees by Race/Ethnicity of Recipients 1990-1998*, Section B, Detailed Statistical Tables Division of Science Resource Studies of the National Science Foundations

[7] McKay, Nellie Y, "A Troubled Peace: Black Women in the Halls of the White Academy" in *Black Women in the Academy: Promises and Perils* Lois Benjamin Ed, University Press, Gainesville, Florida, 1997, pp 11-22.

[8] Hamilton, Alene Hollie, *Perceptions and Experiences of African-American Professional Women Holding Doctoral Degrees: A Participatory Study (Women Professionals)* Ph.D. Dissertation, University of San Francisco, 1995.

[9] Meredith, Michelle, Burke, Susan, "Changing the Environment Through Student Organization" *NAMEPA/WEPAN Joint National Conference Proceedings* Alexandria, Virginia, 2001.