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National Action Council for Minorities in Engineering, Inc.

NACME Scholars Profile 2012

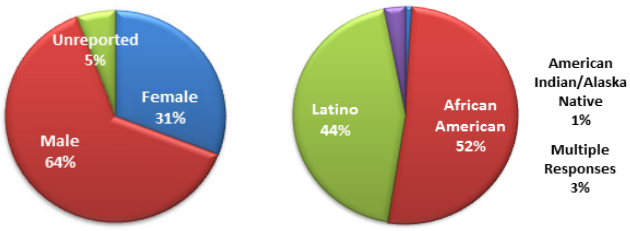
INTRODUCTION

Since its inception in 1974, NACME has awarded more than $124 million in scholarships and program support to help more than 24,000 underrepresented minority students achieve a post-secondary engineering education. Each year, NACME is responsible for more than $4 million in scholarship funding. Since 2002, the flagship scholarship has become the NACME Scholars (Block Grant) Program. This grant program provides scholarship support in the form of a lump sum grant to partner institutions who enroll students from three sources – first year students identified by NACME or the partner universities, transfer students from two-year colleges, and currently enrolled students who have completed at least one year of engineering study. At the end of each academic year, NACME surveys Scholar graduates to ascertain the impact of the grant, gauge student success, and track the scholars' entry into the field of engineering.

NACME Scholars, 2012

In 2012, 107 NACME Scholars who had graduated or were expecting to graduate with bachelor's degrees in engineering responded to the survey. Scholars[1] identified as 31 percent (n=33) female, and

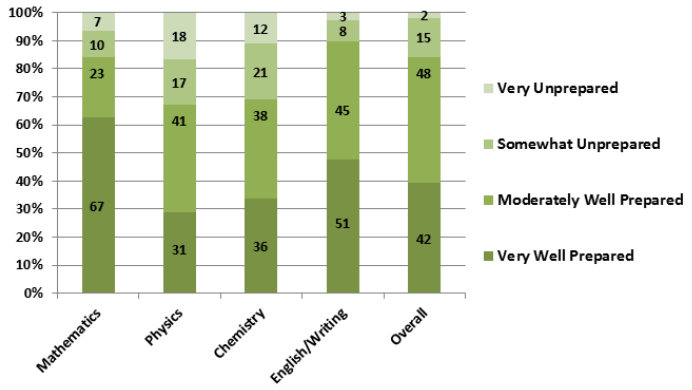
Figure 1. Demographics of NACME Scholars, 2012



64 percent (n=68) male. The majority were African American (52 percent) and Latino (44 percent). Additionally, 1 percent of this year's scholars are American Indian/Alaskan Native, and a small percentage of students identify multiple backgrounds (Figure 1). The average age of Scholars was 24, with the youngest graduate age 22 and the eldest, 41. Five percent of the Scholars report having children, and 67 participants (63 percent) reported growing up in a home with at least one adult who had attended college.

The majority of Scholars (82 percent) graduated from a high school in the United States. Figure 2 illustrates how academically prepared students were for their post-secondary engineering de-

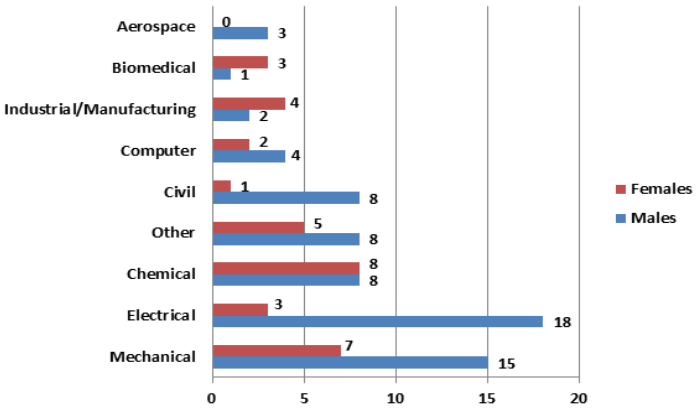
Figure 2. High School Preparation for Undergraduates in Engineering



gree coursework upon entry into college. Scholars reported being most unprepared in physics and chemistry, and more prepared in mathematics. Within this group of Scholars, 34 percent either began their post-secondary education at a community college, or took classes at a community college that were transferred to their degree major. The majority attended a four year institution.

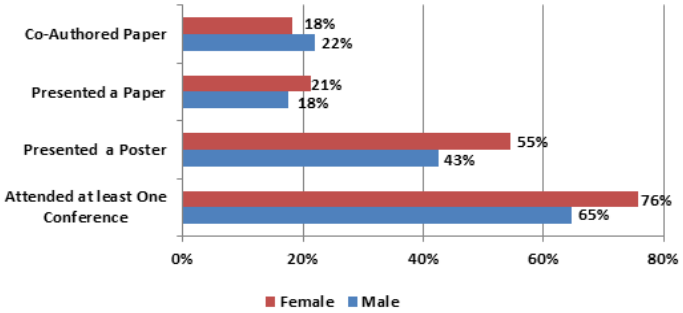
The most common engineering fields among Scholars were mechanical (22 percent), electrical (21 percent), and chemical (16 percent), and the least common biomedical (4 percent), and aerospace (3 percent). In mechanical engineering, 66 percent of the Scholar graduates were male, and 33 percent were female. Only 14 percent of electrical engineering Scholars were women, yet an equal 50 percent of both men and women graduated with degrees in chemical engineering. In fact, 24 percent of all female Scholars for 2012 graduated with degrees in chemical engineering (Figure 3).

Figure 3. NACME Graduating Scholar Majors by Gender



The **National Action Council for Minorities in Engineering, Inc. (NACME)** was founded in 1974 to ensure American competitiveness in a flat world by leading and supporting the national effort to expand U.S. capability through increasing the number of successful African American, American Indian, and Latino women and men in science, technology, engineering and mathematics (STEM) education and careers. NACME Alumni hold leadership positions in industry, medicine, law, education and government. With funding from corporate and individual donors, NACME has supported over 24,000 students with more than $124 million in scholarships and other support. Currently NACME provides scholarship support to more than 1,300 college of engineering students through a national network of 50 partner universities. NACME's STEM education strategy incorporates a continuum of programs and activities from middle school through workforce entry. Visit us at **www.nacme.org**.

Figure 4. Undergraduate Research of NACME Scholars by Gender



NACME Scholars were able to take advantage of opportunities to prepare for graduate level education or professional work post degree. The majority of Scholars reported attending at least one conference, and approximately half of all Scholars presented a poster, and 20 percent presented papers at a conference (Figure 4). As a first step for graduates becoming a professionally licensed engineer, 11 percent of Scholars had already taken the Fundamentals of Engineering (FE) Exam and 45 percent plan to take it within the next 12 months (Figure 5).

Figure 5. Scholar Completion of the Fundamentals of Engineering Exam

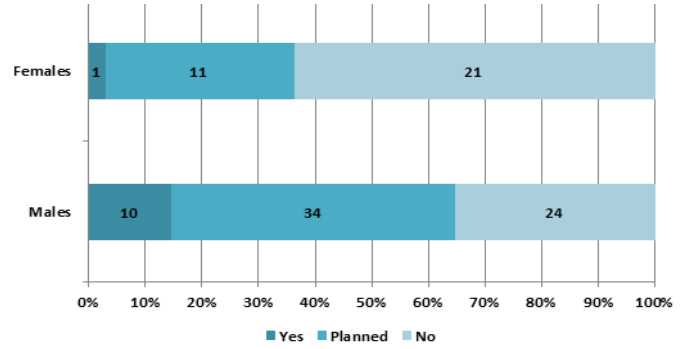
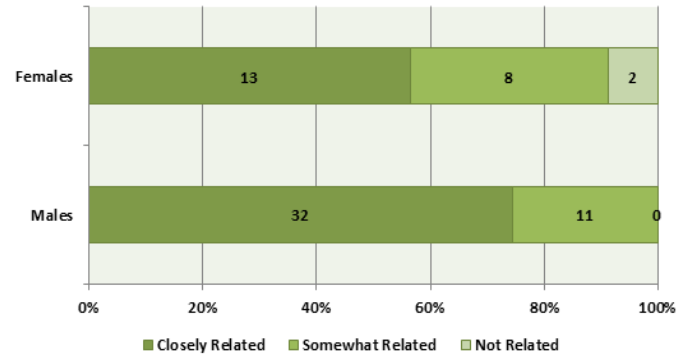


Figure 6. Immediate Post-Graduation Plans

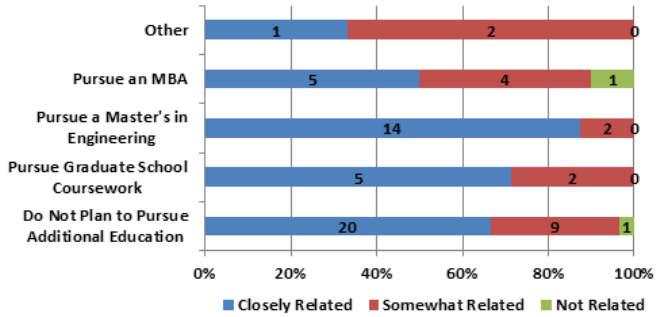
Post-graduation plans for Scholars include pursuing graduate coursework and employment (Figure 6). Almost one-third have already accepted a full-time employment position, while 34 percent are pursuing additional education. Of those entering the workforce, 66 percent are employed in their degree-related content area (Figure 7).

Figure 7. Post-Graduation Employment Related to Field of Study



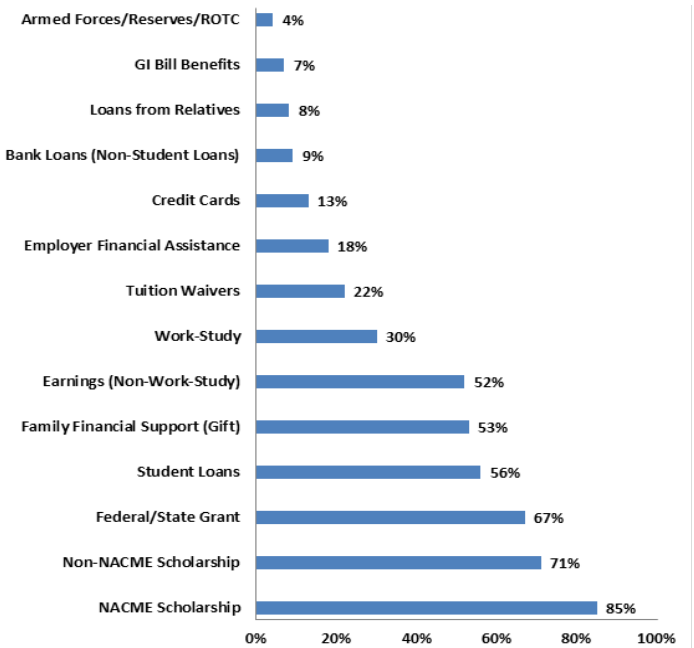
Scholars rated their post-graduation plans in terms of career relatedness, as shown in Figure 9. The majority of those continuing their education planned to pursue an MBA, a master's degree in engineering, or general graduate coursework. Of these, 73 percent considered pursuing additional education as closely related to their career plans, while 67 percent of those who are not continuing their education at this time also consider this decision as closely related to their career plans and objectives.

Figure 8. Scholar Educational Plans for Next 12 Months Related to Career



NACME is committed to providing opportunities and financial support to underrepresented minority students in engineering. Since 1974 NACME has supported more than 24,000 students with more than $124 million in scholarships and other support, and currently has more than 1,300 Scholars at 50 partner institutions across the country. Funding for these scholarships comes, in part, from generous gifts from companies and organizations serving on NACME's Board of Directors and Corporate Council. NACME Scholars rely heavily on funding provided by the NACME Scholars (Block Grant) Program. Approximately 85 percent of students receiving funding from NACME rated the NACME Scholarship as the most important funding source (Figure 9) over the course of their undergraduate career.

Figure 9. Very Important Funding Sources for NACME Scholars, 2012



[1] 'Scholars' as identified in this brief, refer to surveyed NACME Scholars

ALL tables and figures in this brief present data results of the NACME Block Grant Scholar Survey (GSS) Graduating students, 2011-12. The full GSS is available for download on our web site www.nacme.org/publications, under "Evaluations"