

Our Promise

We engineer opportunity for minorities in STEM.

Our Mission

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 young women and men in science, technology, engineering, and mathematics (STEM) education and careers.

Our Vision

An engineering workforce that looks like America.

Our Belief

Diversity drives innovation.

Our Purpose

Through partnerships with like-minded entities, we serve as a catalyst to increase the proportion of African American, American Indian, and Latino young women and men in STEM careers. We inspire and encourage excellence in engineering education and career development toward achieving a diverse and dynamic American workforce.

Shaping an American STEM workforce where diversity drives innovation and global competitiveness

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COLLEGE PREPARATION AND AFFORDABILITY

Policy Recommendations

K-12 Education: Early education efforts are needed to close the achievement gap and develop student interest in STEM. Federal policies must be based on research and best practices. According to esteemed NACME Research and Policy Advisory Council member Dr. Etta Ruth Hollins, from the University of Kansas City, Missouri, research evidence indicates that “teaching practices located at the nexus of culture and learning provide underserved students with more meaningful opportunities for learning than traditional approaches¹.” Hollins advocates a holistic-based practice approach in which teachers understand how students from different cultures learn, and how to use what students already know in order to facilitate learning. In addition, NACME endorses the **Algebra by 7th Grade (Ab7G) Initiative**, which is an early intervention effort that developed as an outcome of the February 2013 meeting of minority STEM organizations hosted by the White House Office of Science and Technology Policy, (OSTP).

Community College: In 2012 (fall semester), 59 percent of American Indian undergraduates, 56 percent of Latino undergraduates, and 48 percent of African American undergraduates were enrolled in community college². Table 1 (see next page) shows

that two-year students have less out-of-pocket costs than four-year students, and only 13 percent of students who attended public two-year colleges took out loans in 2007-08³. **America's College Promise Proposal** aims to create a new partnership with states to help them waive tuition in high-quality programs for responsible students, while promoting key reforms to help more students complete at least two years of college. This plan can provide a major boost to energizing the community college pathway to engineering for all Americans, and specifically for underrepresented minorities (URMs).

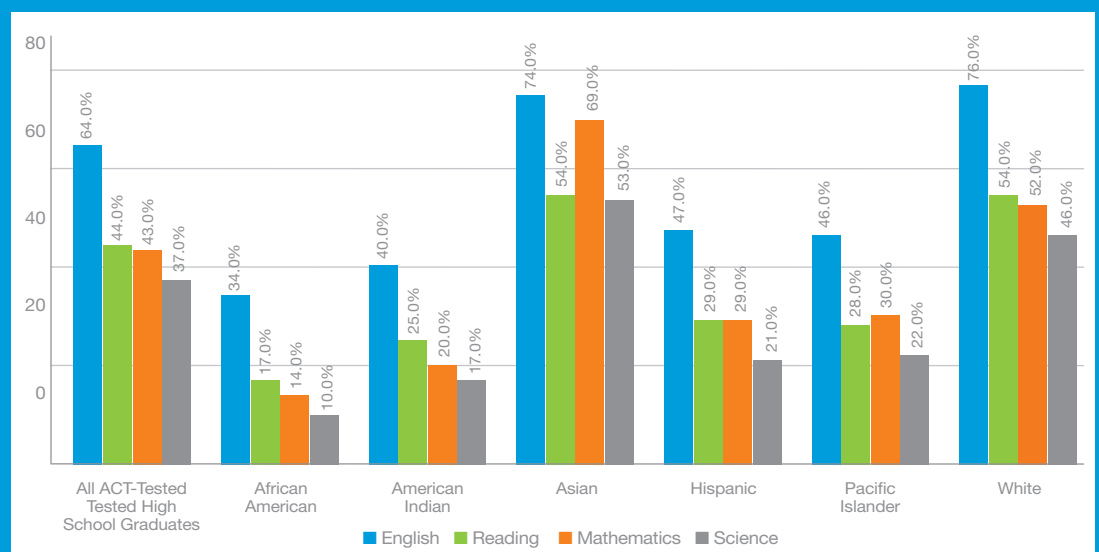
Legislation that NACME supports: S.671 -

Computer Science Education and Jobs Act of 2015:

a bill sponsored by Senator Robert Casey Jr. (D-PA), designed to amend the Elementary and Secondary Education Act of 1965 to strengthen elementary and secondary computer science education; **H.R.1131 -**

Fairness in Student Loan Lending Act: a bill sponsored by Congressman Jim McDermott (D-WA), designed to amend the Higher Education Act of 1965 to provide for the refinancing of certain federal student loans, and directing the Secretary of Education to establish eligibility requirements based on a borrower's income or debt-to-income ratio that take into consideration providing access to refinancing for borrowers with the greatest financial need.

Figure 1.
Percentage of 2014 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Race/Ethnicity and Subject⁴



Key Challenges and Opportunities

Lack of Science, Technology, Engineering, and Mathematics (STEM) Preparation for Underrepresented Minorities in K-12 Education

Underrepresented minorities (URMs) are failing to earn competitive scores on standardized tests used for college admission. The ACT provides benchmarks for their subject-area tests that represent the level of achievement required for students to have a 50 percent chance of obtaining a B or higher or a 75 percent chance of obtaining a C or higher in corresponding credit-bearing first-year college courses. A lower percentage of underrepresented minorities meet these benchmarks, on average, than their peers in all four subject groups, as seen in Figure 1 (see previous page).

Dearth of Underrepresented Minorities Enrolling in Engineering and Technology Undergraduate Programs

The lack of preparation of URMs in the core STEM subjects contributes toward consistently lower enrollment rates in undergraduate STEM programs for these groups. While underrepresented minorities make up 37 percent of the college-aged (18-24) population⁵, they only constituted 15.5 percent of full-time engineering and technology enrollments in 2011⁶.

High Out-of-Pocket Costs for Undergraduates from All Income Brackets

College affordability is a significant barrier to postsecondary degree attainment. College enrollees in all income groups have high out-of-pocket costs for their education, as seen in Table 1.

Return on Investment for STEM Undergraduate Degrees

STEM jobs have grown three times as fast as non-STEM jobs since the turn of the century, and STEM workers command higher earnings than their peers⁸. The average entry level salaries for STEM and non-STEM fields are shown in Figure 2.

Forbes.com created a list of the top 10 bachelor's degrees with the highest salary potential, based on the 2014-15 College Salary Report from Payscale.com. All 10 jobs on this list were STEM-related, and nine were engineering degrees¹⁰.

More students need to enroll in STEM majors that provide a high Return on Investment to combat the high debt levels that accompany a college education. Since 1974, the National Action Council for Minorities in Engineering, Inc., (NACME) has helped to increase the number of successful African American, American Indian, and Latino young women and men in STEM education and careers.

Table 1. Average Out-of-Pocket Net Price of Postsecondary Education Among Undergraduates, 2011-12⁷

	Out-of-Pocket Net Price
Public 2-year	\$9,900
Public 4-year	\$11,800
Private nonprofit 4-year	\$18,100
For-profit	\$15,000
Lowest 25 percent - dependent student family income	\$8,500
Lowest 25 percent - independent student income	\$10,900

Note: Net price represents total price of attendance minus total aid.

Figure 2. Average Entry-Level Salaries: STEM vs. Non-STEM⁹



Endnotes

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