

Celebrating Partnerships: 2015 NACME Continuum Meeting

Falls Church Marriott, Fairview Park
Falls Church, VA

October 13-14, 2015

Corporate Sponsor

NORTHROP GRUMMAN

The logo for Northrop Grumman, featuring the company name in a bold, italicized, blue sans-serif font. Below the text is a thick, blue, curved line that starts under the 'N' and ends under the 'M', arching upwards in the middle.

Today's Agenda – Day 2

- NACME STEM Integration Model – Outcomes
- NACME Next Five-Year Strategy – Scholarships and University Relations
- The Big Study: Key Findings

NACME STEM Integration Model

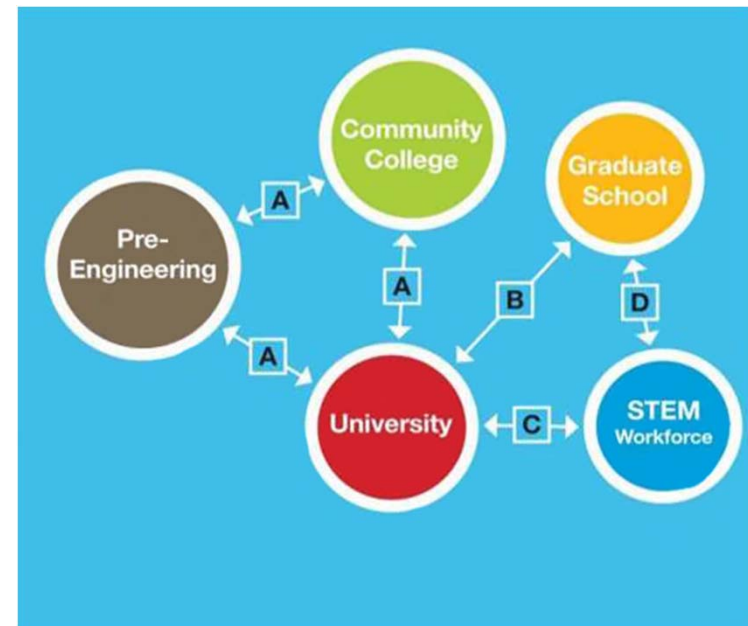
Saundra Johnson Austin

Vice President, Strategic Partnerships
NACME, Inc.

NACME STEM Integration Model

NACME will integrate existing program elements into a unified continuum that leverages existing partnerships for students to move along the NACME Continuum from:

- a) Academies of Engineering (AOEs) to NACME Partner Institutions and their linkage to Community Colleges
- b) NACME Scholars to the Alfred P. Sloan Foundation Minority Ph.D. and Sloan Indigenous Graduate Partnership Program faculty
- c) NACME Scholars to board companies for the purpose of gaining hands-on engineering experience in a summer internship/co-op assignment or to seek a full-time position
- d) Alfred P. Sloan Foundation Minority Ph.D. and Sloan Indigenous Graduate Partnership Program Scholars to NACME Board Companies



The NACME STEM Integration Model

New York/New Jersey Regional Pilot – Launched March 26, 2012

ACADEMIES OF ENGINEERING

- Albany High School
Albany, NY
- ***Bronx Engineering and Technology Academy
Bronx, NY***
- City Polytechnic High School
Brooklyn, NY
- ***High School for Construction Trades Engineering and Architecture
Ozone Park, NY***
- ***John E. Dwyer Technology Academy
Elizabeth, NJ***
- ***Manhattan Bridges High School
Manhattan, NY***
- ***Rochester STEM Academy of Engineering
Rochester, NY***

Signed MOUs

TARGET COMMUNITY COLLEGES

- Essex Community College
- Hostos Community College
- La Guardia Community College
- Monroe Community College

PARTNER UNIVERSITIES

- ***Cornell University***
- ***New Jersey Institute of Technology***
- ***Polytechnic Institute of New York University***
- Rochester Institute of Technology
- ***Rutgers, SUNJ***
- ***Stevens Institute of Technology***
- ***SUNY Oswego***
- Syracuse University
- ***The City College of New York***

ALUMNI

- NY/NJ NACME Alumni
- NY/NJ Sloan Alumni

SLOAN FACULTY

- The City College of New York

BOARD COMPANIES

- ARCADIS U.S., Inc.
- AT&T
- Bristol-Myers Squibb Company
- Consolidated Edison Company of New York, Inc.
- Deloitte & Touche LLP
- IBM Corporation
- L-3 Communication Corporation
- Merck & Co., Inc.

The NACME STEM Integration Model

Texas Regional Pilot – Launched February 8, 2013

ACADEMIES OF ENGINEERING

- **AJ Moore Academy**
Waco
- **Cesar Chavez Sr. High School**
Houston
- **Emmett Conrad High School*
Dallas
- **H. Grady Spruce High School*
Dallas
- **Hillcrest High School*
Dallas
- **Justin F. Kimball High School*
Dallas
- **Lincoln High School*
Dallas
- **North Dallas High School*
Dallas
- **Sam Houston High School**
San Antonio
- **West Orange-Stark High**
School Orange
- **Woodrow Wilson High School*
Dallas
- **W.T. White High School*
Dallas

TARGET COMMUNITY COLLEGES

- Alamo CC
- College of the Mainland
- El Paso CC
- Houston CC
- San Jacinto CC

PARTNER UNIVERSITIES

- **Prairie View A&M**
- **Univ. of Houston**
- Univ. of Texas at Austin
- **Univ. of Texas at Dallas**
- **Univ. of Texas at El Paso**
- **Univ. of Texas at San Antonio**

** The Dallas Independent School District signed the MOUs on Behalf of the AOE's in Dallas*

Signed MOUs

ALUMNI

- Texas NACME Alumni
- Texas Sloan Alumni

SLOAN FACULTY

- Rice Univ.
- Texas A&M
- Univ. of Texas, Arlington
- Univ. of Texas, Austin

BOARD COMPANIES

- AT&T
- BP America, Inc.
- Dow
- Exxon Mobil Corporation
- Hewlett-Packard
- L-3 Communications
- Marathon Oil Company
- Shell Oil Products U.S.

NACME Memorandum of Understanding

Highlights

- University Partners
 - Provide summer programs to high school students
 - Offer summer bridge programs to eligible incoming first year students admitted to college of engineering
- Corporate Partners
 - Serve on AOE Advisory Boards
 - Offer field trips and internships to AOE students
- AOE's
 - Encourage graduating high school seniors to apply for the one-time \$2,500 NACME Pre-Engineering Scholarship
 - Provide data to NACME on graduating seniors

NACME Pre-Engineering Scholarship Eligibility

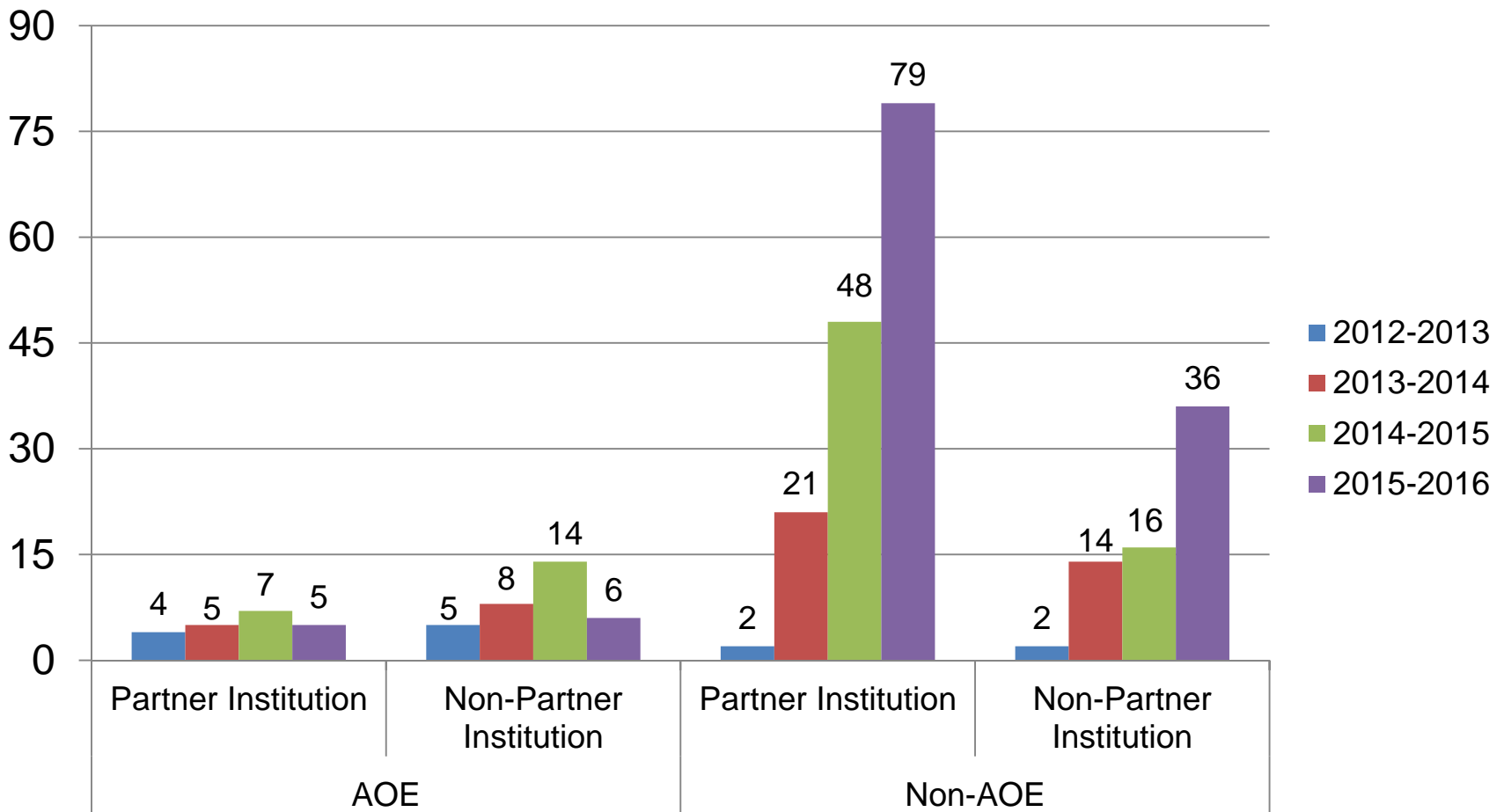
- African American, American Indian, or Latino graduating high school seniors
- U.S. citizens or permanent residents
- Participants in an Academy of Engineering (a National Academy Foundation network of career-themed academies) or a pre-college or high school program focused on math, science, and engineering;
- Outstanding academic achievers earning a minimum cumulative 3.0 GPA or “B” average
- Have a preferred combined SAT score of 1650 for critical reading, writing, and math, with a minimum math score of 550; or minimum composite ACT score of 24, and a minimum score from the math section of 24
- Admitted into an engineering program as a full-time student. Priority will be given to applicants who have been admitted to a NACME Partner University
- Application deadline is April 1st. Visit nacme.schoolforms.org to apply

NACME STEM Integration Model

Dr. Christopher Smith

Director, Research and Program Evaluation
NACME, Inc.

NSIM Outcomes - Scholarships



NSIM Outcomes – Partner Surveys

- Conducted at the end of the 2014 and 2015 school years
- Main Findings (n=18):
 - 83.3 percent of respondents rated NACME’s engineering awareness materials as valuable
 - 44.4 percent of respondents assessed their students’ access to NACME Partner Institutions for summer program experience as excellent or good
 - 50.0 percent of respondents believed that access to college and career opportunities for their students has increased due to the NSIM
 - 83.3 percent of respondents rated the value of the NACME partnership for their school as valuable or very valuable

NSIM Outcomes – External Evaluation

- Conducted by Metis Associates in 2013-2014
- Main Findings:
 - There is strong support among all stakeholder groups for the NSIM. Respondents believe the model is well thought out and provides a strong framework for collaboration to achieve NACME's goals
 - The success of the NSIM requires a systematic and strategic approach to the selection of key partners that are aligned to the needs of the target populations in each location.

NSIM Outcomes – External Evaluation

- Recommendations
 - Strategically form partnerships within regions
 - Organize meetings around necessary student supports
 - Engage in data-driven decision making
 - Develop data-sharing agreements

NSIM Outcomes – Summary

- NACME must develop a more strategic approach to the selection of key partners within the NSIM
- The organization should engage in data-driven decision making, where data guides the partnerships that are developed
- While there is strong support for the NSIM, all of the partners are not aware of the full benefits of the model for their particular school