

Diversity and Inclusion in the Science, Technology, Engineering, & Mathematics (STEM) Workforce A STRATEGIC GLOBAL IMPERATIVE

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ASME is committed to achieving a truly diverse and inclusive science, technology, engineering, and mathematics (STEM) workforce in the U.S. and all over the world. We offer the following guiding principles to help ASME and the broader STEM community better envision and implement the concept of diversity and inclusion in the STEM workforce.

Guiding Principles¹:

- 1. Diversity is defined as "the ways in which we differ as individuals or organizations, and the commonalities and similarities that justify and motivate and inspire all people and entities to work collaboratively together in order to achieve mutually beneficial outcomes."
 - Diversity "includes differences such as age, gender, ethnicity, physical appearance, thought styles, religion, nationality, socio-economic status, belief systems, sexual orientation, life and work experiences and education. Diversity that is recognized, valued and most importantly, strategically managed within and without an organization can drive successful outcomes and business results."
- 2. Inclusion is "the creation of opportunities and the elimination of barriers that allow all people to participate in and contribute to ideation, planning, projects, programs, processes, teams, organizations, social activities, fun or any other meaningful opportunity, that helps achieve successful outcomes."
- 3. Strategic Diversity is "the effective deployment of strategies that leverage the strengths of all people and/or of an organization in order to operate successfully within a diverse marketplace or within a uniquely different society, institution, partnership or similar entity."
- 4. Managing Diversity is "the ability to effectively inspire and enable all people to:
 - a. align to a common vision
 - b. communicate effectively and assure understanding
 - c. know and accept what is of value to others
 - d. leverage the strengths of others and trust their commitment to deliver as agreed, and
 - e. appropriately recognize and celebrate successes often."

Policy Recommendations:

Specific to the U.S., ASME would like to offer the following policy recommendations. In 2014, women were awarded 19.9% of engineering bachelor's degrees, while African Americans and Hispanics represented only 3.5% and 10.1% respectively². While these numbers do represent significant gains from the 1980s, there is still much work that needs to be done.

Continued on Reverse →

¹ASME Policy 15.11— ASME Policy on Diversity and Inclusion

² Yoder, Brian. "Engineering by the Numbers." American Society for Engineering Education 2014. http://www.asee.org/papers-and-publications/publications/14_11-47.pdf

The U.S. economy relies on the productivity, creativity, and entrepreneurship of all U.S. citizens. With the predicted changes in future U.S. workforce demographics, increasing the participation of women and underrepresented groups in the U.S. STEM workforce must become a 21st Century national imperative. We urge policymakers to strengthen and re-examine oversight of existing legislation and programs aimed specifically at broadening participation by under-represented groups in STEM fields, including that which:

- Increases public awareness of STEM careers, including supporting efforts to foster outreach to all students, teachers, parents, and K-12 guidance counselors;
- Enables all students to have access to a rigorous STEM curriculum, hands-on laboratory experiences, and informal learning that increases academic performance and interest in STEM careers;
- Offers incentives and mentoring for women and under-represented groups to pursue STEM coursework and careers, including teaching careers, and continue to provide professional achievement opportunities post-graduation and throughout their careers;
- Provides all members of society the opportunity to fully participate in the STEM pipeline and workforce by addressing current obstacles to the participation of women and underrepresented groups in the STEM workforce, as well as ensuring to acknowledge past accomplishments.

By dramatically improving the participation of women and talent from other under-represented groups in the STEM workforce, the U.S. can leverage the diversity of these individuals to fuel the innovation necessary for our global competitiveness, as well as meet the challenges of a changing world.