NATIONAL ENGINEERING FORUM

National Engineering Forum (NEF) Regional Dialogue: Engineering Thought Leadership
Houston, Texas at the Petroleum Club
November 12, 2013

Overarching Mission for Year One:

Lockheed Martin, the Council on Competitiveness, and the National Academy of Engineering launched the National Engineering Forum to address three engineering challenges in the United States: the *capacity* of our technical talent to fill current and future jobs, our engineering workforce's *capability* to address 21st century challenges, and our nation's *competitiveness* on the world stage. A series of regional dialogues will create grassroots networks of key influencers from academia, business, government, and the media, as well as students. Sustained input from these groups will make an impact on the NEF agenda, helping turn findings into action. The regional dialogues will culminate in a national cornerstone event.

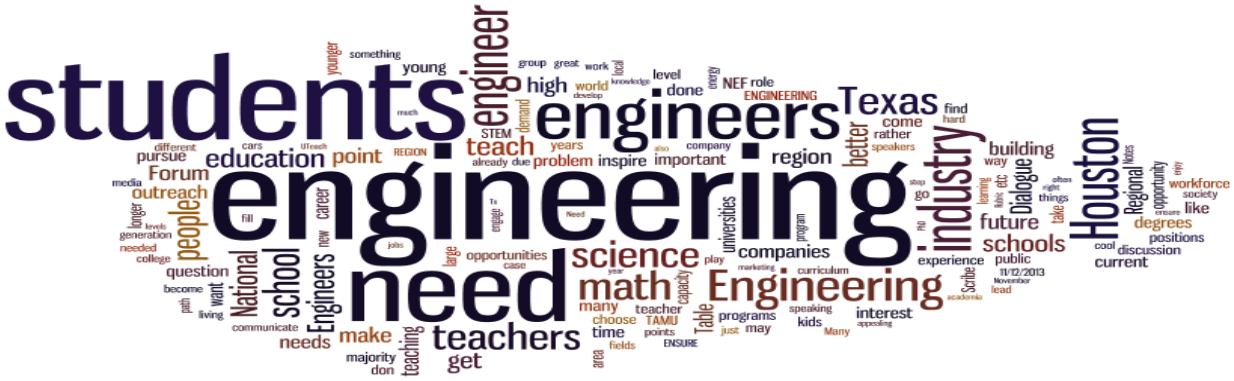
The regional dialogues provide NEF with a nationwide survey of thought leaders, and enable a dynamic view of both the past and current state of engineering based on the expertise of those best positioned to help address the three engineering challenges. These sessions provide a platform for an engaging narrative that appeal to students and engineering professionals alike.

Key themes from the Houston Dialogue:

A number of leaders from industry, academia and the media participated in the NEF regional dialogue event which was hosted by Texas A&M University at the Petroleum Club of Houston. The dialogue took place in downtown Houston exuding the diversity of people, industry, companies and the landscape of Texas. The area boasts their engineering successes through world class Universities and leading the industries of Energy and Healthcare, Discussions focused on addressing the lack of engineering learning in early education and the need to celebrate engineers. While improving education is important, individuals stressed the need for engineers to reach out, recruit and inspire the potential young engineers of the future.

Key action items that emerged in the dialogue:

- Engineers need to reach out, recruit, and inspire the future generation of engineers.
- Cultivate industry partnerships with academia for real-world, interdisciplinary problems
- Promote annual industry sponsored events for K-12. Create expectation so that these events are the norm, not the exception.
- Develop engineering teaching methodology that is logical and easy for teachers to follow.
- Communicate need for "Professors of Practice," professors with experience in industry, not necessarily a PhD.
- Focus on what industries anchor the area and promote that job growth.
- Consider expanding the capacity for university engineering departments.
- Communicating engineering expectations is key. Let NEF serve as a clearinghouse and catalyst for reimaging the reality of engineering.



Word Cloud based on conversations at the Houston regional dialogue Nov. 12, 2013 in Houston, Texas at The Petroleum Club.