



**National Engineering Forum (NEF) Regional Dialogue: Engineering Thought Leadership
Tristate Region at the New York Yacht Club
September 18, 2012**

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. At the outset, a series of regional dialogues is creating grassroots networks of key influencers, including experts in academia, business, government, and the media. A sustained input from these groups will impact the NEF agenda, helping turn findings into action. The regional dialogues will culminate in a cornerstone national event in Washington, D.C. in 2014.

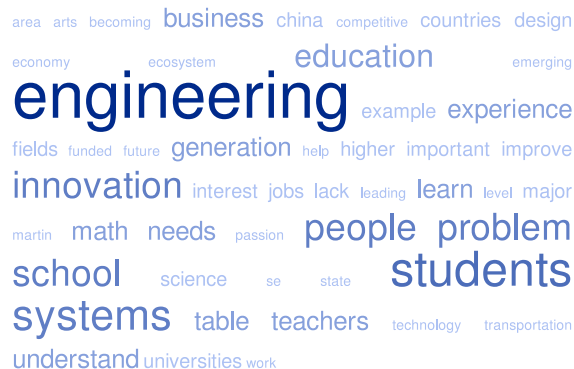
The regional dialogues provide NEF with a nationwide survey of thought leaders and enable a dynamic view of both the past and current state of engineering based on the expertise of those best positioned to help address the three engineering challenges. These sessions provide a platform for an engaging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

Key themes from the New York Dialogue

The most vivid theme from the inaugural dialogue in New York is engineering's role in propelling the human imagination and underpinning human evolution. It is the culmination of creative synthesis, innovation, problem-solving, building, creating, designing and developing. It is doing something about energy, roads, bridges and tunnels, and about water, security and safety. Engineering responds to our need for comfort and entertainment and for homes and buildings. It is also about going to space, and ultimately, Mars and beyond. Engineering has a compelling story and we need to find ways to share it.

Key action items that emerged in the dialogue:

- Convey the power of engineering as a verb, rather than a discipline: what people do specifically rather than their specialty. It is important to convey this to parents, educators, and career counselors.
- Emphasize the act of design and creativity, rather than the act of analysis. Analysis is the means to the end, while design is the objective. Engineering curricula, faculty and mentors should fully support.
- Engage with mainstream media to celebrate innovation, creativity, and design, rather than treat it as a commodity. There are exceptions to this rule (e.g., Apple), but creative synthesis surrounds us, and should be the object of attention.
- Teach engineers the importance and power of communication and networking. They have an important story to tell.
- Make other influencers and key audiences aware that engineering does not happen in isolation, it is inspired by problems and challenges, it is inspired by reflective imagination of how life could be, it is inspired by the arts, by application, and by risk taking. Therein lies the power and influence of innovation ecosystems (e.g., New York City, Silicon Valley, Southern California, Detroit).



Word Cloud created from discussions on September 18, 2012, at the NY Yacht Club.