

White House Remarks

February 8, 2012

Mr. Otellini, Ms. Jarrett, Secretary Chu, Secretary Duncan, distinguished leadership of the American Society for Engineering Education, and other honored guests: On behalf of my fellow engineering deans here today – especially those serving with me on the Deans Advisory Committee for the High Technology Education Working Group of the White House Council on Jobs and Competitiveness – thank you for the opportunity to be here with you.

We all know that higher education is one of America's greatest assets. And engineering education is one of the strongest components of American higher education. So in the engineering colleges represented here today, as well as our colleagues who are not here, we see what amounts to a **competitive advantage** for our nation – and it's a competitive advantage that must be leveraged.

The President's recent call to action challenging the nation to graduate another 10,000 engineers per year is both timely and crucial. To achieve this aim, engineering schools and colleges must meet two fundamental challenges – **attracting more young minds** to the field of engineering and **keeping them there until they successfully complete engineering degrees.**

These two challenges require us to embark upon some innovation of our own. And recent months have led to discussions among my colleagues that have affirmed that we are up to the task. For participating in these discussions, I am particularly grateful to my fellow members of the Deans Advisory Committee:

- Leah Jamieson of Purdue University (who could not be here today);
- Louie Martin-Vega of North Carolina State University;
- David Munson of the University of Michigan;
- Darryll Pines of the University of Maryland; and
- Shankar Sastry of the University of California at Berkeley

I would also like to acknowledge Paul Otellini for his strong support and insightful leadership throughout our deliberations.

We have all learned together that it is clear that we have to think differently as we showcase engineering to our nation's young people. My colleagues and I have proposed that as we move forward, we recognize excellence in engineering education by the level of commitment to retention, graduation, and diversity. While the active participation of engineering deans is essential in this endeavor, we could not be more pleased that the ASEE has agreed to partner with us to lend expertise in the development of an appropriate and relevant set of metrics in these areas.

Engineering is a profession of great wonder and rich reward. In communicating the appeal of our profession, we must tap into what young people value most in their life's work – flexibility, connectivity, visibility,

and above all else, the **chance to use technology to make a real impact** on our nation and world and to change our society for the better.

This includes reaching out to women and underrepresented minority students. To ensure that the workforce of tomorrow has the skills to regain the nation's leadership in technology, every U.S. citizen must be given an equal opportunity to develop the tools and acquire the knowledge needed to compete. It's just common sense: **innovation must be tied to inclusive excellence**, because you never know where the next great invention, or the next great idea, will come from. But we do know that it's most likely to emerge when people of different perspectives are working together.

It's not enough to find and attract students, however – we must also do everything in our power to keep them engaged in engineering study. This involves providing academic support and financial aid ... connecting their curriculum to real-world situations ... involving them in research ... helping them build a professional network before their first internship ... and communicating that **what they do really matters** – and that their university and profession stand with them and behind them in their effort.

These approaches work. We've seen that at my home institution, Georgia Tech. Using a mix of strategies and tactics, we've been able to hold on to 94 percent of our freshmen after their first year, and we've succeeded in graduating 8 out of every 10 of our students within six years. Even more so, we are attracting women and minorities to engineering in large numbers

and, I am proud to say, graduating them, making Georgia Tech the nation's largest and most diverse college of engineering.

As our work goes forward, we will be sharing best practices for recruitment and retention and creating new incentives for the hundreds of American universities offering engineering programs. **Our collaboration will be groundbreaking** in its breadth and depth. But that's what is needed to meet the challenges ahead. As with scientific exploration, the more minds working on the problem, the better.

So: Let's build on this day, and the days that came before this one, to **create the capacity** our nation requires ... to prepare and graduate the engineers who will **invent our future** and strengthen our nation's competitive advantage ... and to expand the opportunity to all of those who can contribute to making an impact.

Thank you.

Now it is my pleasure to introduce my friend and colleague, Don Giddens, President of the ASEE, to offer his remarks. Don ...