

Siemens Technical Scholars 2015 Announcement
Remarks for David Etwiler, CEO, Siemens Foundation
October 26, 2015

Good afternoon everyone! My thanks to Josh for the warm introduction. I could not be more excited to be here today!

We are thrilled with our new partnership with the Aspen Institute and Josh and his team at the College Excellence Program. They're doing tremendous work to elevate and refine the community college sector. We're so proud to partner with them on the Aspen Prize for Community College Excellence and on this new initiative, Siemens Technical Scholars.

I want to thank the other speakers and panelists participating in today's event. And, my sincere thanks to the programs and Scholars we're recognizing today. Your commitment to excellence is why we're here today. It's our great honor to recognize you and your hard work and help tell your stories to the world.

It's fitting that we're having this discussion here, at the Aspen Institute, an entity that represents the importance of self-reflection and big-thinking for the betterment of society and everyone in it. When I joined the Siemens Foundation as CEO two years ago, our board of directors did just that – we took a long look in the mirror and asked ourselves some tough questions.

- Are we maximizing our resources to address a real societal need?
- Does our work align with Siemens' culture and its business assets?
- Most critically, are we leveraging Siemens' knowledge and expertise to best serve society?

While the answer was a resounding yes to much of our work, we knew we could do better. And, we charted a course to do just that – adding a new focus to the foundation's portfolio on workforce development, specifically middle-skill development for STEM jobs.

Before I get into the details of this new program, something we're calling the STEM Middle-Skill Initiative, I'd like to share why this matters to Siemens and the opportunity we envision.

For those of you who don't know us: Siemens has approximately 46,000 employees in the United States and 340,000 employees around the globe where it does business in 200 countries.

- Siemens is an industry leader in high speed and light rail technologies which move more people, faster, safer and cleaner to and from work and home.
- It is an industry leader in health care with life-saving laboratory and imaging technologies that diagnose diseases early, quickly and cost-effectively.
- Siemens leads the way in energy, including natural gas, wind generation and the distribution of power to our homes and economies sustainably and cost effectively.
- And, it's an industry leader in advanced manufacturing processes and the information technology that's the backbone of the 21st century digital factory.

As a company, Siemens understands the importance of strong talent pipeline to advance innovation, its companies, and its customers.

And that's why Siemens is also a leader in workforce development.

From apprenticeships to community college partnerships to leadership on President Obama's Advanced Manufacturing Partnership by Siemens U.S. CEO Eric Spiegel who you will hear from later in the program, Siemens invests in strategies that address its skill needs and strengthen the overall talent pipeline in the sector—and in its communities.

It was these types of experiences, the particular assets Siemens can bring to the table, and our awareness of the challenges many young adults face in the classroom and the workplace, that led us at the foundation to embark on this new direction in STEM middle-skill development.

But why STEM middle-skill development for young adults, specifically? When we looked at the issue in depth, a few key opportunities stood out to us.

First, as research from the Brookings Institution points out, these jobs provide real economic benefit.

- 20 percent of all U.S. jobs are STEM jobs – requiring a high-level of knowledge in at least one STEM area. That's double the share of STEM jobs since the industrial revolution.
- Half of all STEM jobs don't require a four-year college degree and pay \$53,000 on average – that's 10 percent higher than non-STEM jobs with the same credential demands.

That's the kind of accessible pathway that can really make a difference in the lives young people, their families, and our communities.

Second, far too often young people in the U.S. are facing significant barriers to education and employment.

- For September, the unemployment rate for young people ages 16-19 in the U.S. was 16.3 percent, more than triple the national rate.
- An estimated 5.6 million young people in the U.S. are disconnected from school and the workplace.
- And, according to an Educational Testing Service study, U.S. millennials are struggling when it comes to numeracy and literacy skills compared to our international peers. In literacy, the U.S. scored lower than 15 of the 22 participating countries. In numeracy, the U.S ranked dead last.

At the same time, college costs continue to rise, as has the student debt load, making access to postsecondary education difficult for far too many.

Stated simply, the gap between where too many young adults find themselves today and the opportunities possible with STEM middle-skill jobs is simply too wide for us to ignore. And, it's

an area where we know the Siemens Foundation can make a difference. So, here's our strategy.

First, we must increase awareness about these opportunities and change the perception of middle-skill jobs in this country from a "fall back option" to a "career pathway of choice." These are great jobs accessible with low to no student debt and unlimited potential. Besides being a good job in its own right, STEM middle-skill jobs are often a spring board to limitless career pathways. But far too often, these jobs are seen as "dirty" or "dead end," when nothing could be further from the truth, as you'll hear from our Scholars today.

Second, we're identifying, championing and scaling proven training models that provide the skills necessary for these jobs. In the complex landscape of postsecondary education, finding what works and integrating it into the fabric of our training systems is half the battle for students, employers, and colleges.

But we can't do it alone. That's why we've enlisted the help of world-class partners like the National Governors Association's Center for Best Practices and the Aspen Institute's College Excellence Program.

The NGA Center is taking a close look at what makes work-based learning models effective and how states can bring them to scale for young adults. Later this fall, six states will be selected to scale their models to serve more students and employers, and the STEM industries that make their economies prosper. Why work-based learning? The closer the connection between the training and the demands of the employer or an industry, the more likely that training will lead to a job or advancement. And, it's an underutilized method that we believe holds the promise of opportunity and is ripe for growth.

Our partners at the NGA Center have also been selected by the U.S. Department of Labor to provide an array of support activities to the winners of the American Apprenticeship Grants, a historical \$175 million dollar federal investment in scaling apprenticeships in the United States. Siemens understands the value of apprenticeships first-hand, and we at the foundation couldn't be prouder to partner with NGA and DOL in this work.

With our partners here at the Aspen Institute's College Excellence Program, we are proud to support the Aspen Prize for Community College Excellence - the nation's signature recognition of high performance in the sector. In five short years, the Prize has revolutionized how we define success for these institutions and it continues to set the standard for what it means to be a top community college in the U.S.

And, we're working with Aspen to build a cadre of young people to spread the good word about the value of STEM middle-skill career opportunities with other millenials through the Siemens Technical Scholars program – the reason we're all here today.

Utilizing three key metrics of success - achieving excellent student outcomes, advancing social mobility, and meeting essential workforce demands in their communities – outstanding STEM middle-skill programs were selected from among Prize finalist institutions. Those programs, which you'll learn more about today, were reviewed by an outstanding group of education and workforce leaders participating on the selection committee – our sincere thanks to each of you.

Each program nominated outstanding students and recent graduates who've excelled academically and overcome challenges of their own to get to where they are now. Their stories,

many of which are profiled in today's brochure, personalize the opportunity available in innovative STEM fields like advanced manufacturing, information technology, energy, and health care. They're stories of success that debunk the myth that these jobs are anything but a springboard to the American dream.

We're so proud of the 29 Siemens Technical Scholars announced today, who will earn scholarships ranging from \$3,500 to \$10,000 to pay for student loans or put toward the cost of furthering their education. And, we hope other young adults, and those who influence them, pay close attention and learn more about the opportunity with STEM middle-skill careers.

We're already looking forward to the next class of Scholars. For 2016, all of the 150 Prize-eligible institutions will be able to apply and we encourage you to do so.

In the end, this work is about making a difference in the lives of young adults across this country—those who don't yet know the power and potential they hold. With our outstanding partners like Aspen, we know it's achievable.