STEM Initiatives

An Interview with Eric Spiegel,
President and Chief Executive Officer, Siemens Corporation

EDITORS' NOTE *Eric Spiegel assumed his current post in January 2010. Prior to this, he was a Senior Partner at Booz & Company, where he was employed since 1986. Spiegel began his career in the early 1980s at Temple, Barker & Sloane and Brown Boveri (later ABB). He received a bachelor's degree in economics from Harvard University in 1980 before earning an M.B.A. from The Tuck School of Business at Dartmouth College.*

Eric Spiegel

COMPANY BRIEF *Siemens Corporation is the U.S. subsidiary of Siemens AG. With global headquarters in Munich, Siemens AG is one of the world's largest electronics and engineering companies. Founded 161 years ago, the company has 430,000 employees in 190 countries and is a leader in medical technology, power generation, factory automation, transportation, lighting, building technologies, and water technologies. With its U.S. corporate headquarters in Washington, D.C., Siemens Corporation (www.siemens.com) employs over 60,000 people in the United States.*

Community support and corporate responsibility at Siemens has long been a part of your culture. How do you focus those efforts and is it important they align with your business strategy?

Corporate philanthropy is funded by all of the U.S. businesses and we have decided to focus on a few things rather than spreading ourselves too thin.

The main focus is STEM (Science, Technology, Engineering, Math) education, because the DNA of Siemens is around STEM. The company has been around for 160 years because of innovation and a real commitment to science, technology, and engineering.

A lot of companies give out awards to the most profitable business, but at Siemens we celebrate inventors and innovators. Our support of STEM education is Siemens' investment in the next generation of innovators. It's a major focus for us in the U.S. and globally.

What are the key initiatives around STEM?

Siemens Foundation annually spends $7 million on innovative STEM education initiatives. The most notable is the Siemens Competition. It's the nation's premier science research competition for high school students. Winning the Siemens Competition represents the pinnacle of achievement in science research for U.S. high school students. The regional competitions are held at six leading research universities. Winners of the regional competitions come to D.C. to present their research at the National Finals to a group of renowned scientists and mathematicians. Most of the high schoolers have acquired mentors who are helping them with their projects, some of whom are famous and have recognized these young scientists' brilliance.

The students all have to present their ideas to scholars and executives at a big event. The following day, they participate in a 12-minute Q&A in front of the judges, all of whom are experts.

The six regional universities – MIT, Carnegie Mellon, Caltech, The University of Texas, Notre Dame, and Georgia Tech – often offer scholarships to these kids on the spot. Many of these kids are 15 or 16 years old and are operating at a Ph.D. level.

This competition ensures that these young minds move forward to the next level when, in many cases, they might have a lot of talent but not all of the resources. Plus, we get to work with a lot of great universities, many with which we also do joint research; we work with a dozen or so colleges in the country to do research around STEM-related activity.

We also have programs for younger students and teachers through the foundation. Siemens Teachers as Researchers (STARs) is a program that brings teachers to the Department of Energy's Oak Ridge National Lab for two weeks to participate in hands-on research so they can take that experience back to the classroom.

We also have a Siemens STEM Institute, which Discovery Education is involved with, where 50 teachers are selected for a week-long professional development program at Discovery's headquarters in Silver Spring, Maryland.

The Siemens STEM Academy was founded last year and links up online the STARs program, the STEM Institute, and the Academy, which is a portal where teachers can go in and access teaching resources and engage with other STEM educators.

How do you communicate these efforts internally and how critical is this work to the morale of the company?

The foundation is the one thing that, more than anything else, people at Siemens connect with. Everyone is incredibly proud when they learn about our scholarship winners and see the Siemens Competition finalists on the ABC JumboTron in Times Square.

It's nice to be able to follow up with some of the students and hear about where they are now. Some of them have their own start-up companies; some work at Siemens; some are in big companies in research positions; and some are teachers or have gone on to get Ph.D.s. It's a very impressive group and it makes people feel good to know that our efforts are having an impact.

With the $7-million annual investment you're making in this area, do you use metrics to track impact?

We don't have any metrics around it. The only thing we address every year is looking for ways to get more people involved in our educational outreach initiatives and we've seen a consecutive increase in participation year after year.

The philosophy at Siemens is that education brings know-how, innovation, and jobs. So if we're helping to drive education, develop know-how, and innovate, that will be a good thing for the company and the world in general, and it will create jobs. If there were 100 of these programs and it started 10 or 15 years ago, we might not be in the same position of trying to figure out how to create more jobs today.

The U.S. is such a large market for Siemens. How close is coordination region to region when it comes to messaging?

Pretty close. We have a matrix organization, so there are 15 global divisions that have P&Ls, and each of the big countries have P&Ls. So if you want to get support for something in the U.S., you also have to get buy-in from these global businesses.

Things like STEM get global buy-in. That's why it is such a popular topic in the company; innovation is Siemens – that is the word you hear most when people talk about what differentiates Siemens from its competitors.

It is amazing the number of technologies that we now consider household products that Siemens first developed, including the telegraph and X-rays. ●