

30 Feet Up:

EPSE Turns Technologists and Scientists Into Effective Business Leaders

By Andrea Siedsma

Ana Brill is afraid of heights. But the trained engineer still managed to climb up a telephone pole 30 feet up in the air, grab on to a swing and then jump off.

“I was very proud of myself,” says Brill, manager, engineering and airbus supplier support for Goodrich Aerostructures Group. “I learned that we all have fears not only in physical situations but also at

During her training, Brill was promoted to management, and now has three groups of engineers reporting to her.



Brian Vilbrandt of BAE Systems and Coleman Youngdahl of Hewlett Packard test their limits during a 30-foot high ropes exercise in Vista, California.

work. To have your team cheer you on and have that expectation that you can do it really helps.”

Brill’s experience came during an outdoor team building exercise as part of UC San Diego Extension’s Executive Perspective for Scientists and Engineers (EPSE). In its 23rd year, EPSE fosters teamwork and leadership by offering courses that provide techies with insight on the business and management challenges technology companies face today. This knowledge allows the participants to better contribute to their company’s success. The outdoor exercises are just as important as the classroom instruction, says EPSE director Gary De Spain.

“A lot of people don’t understand why we have them do something physical,” De Spain says. “We are standing outside in a field in Vista and they wonder why. It doesn’t look like a science or R&D lab or a board room. We have facilitators let them know how they can relate this kind of personal challenge back to the workplace. We

ask them, ‘What have you learned today about doing something different or by pushing yourself beyond the normal limits?’ These challenges are good because it puts them outside their comfort zone.”

Brill was put in another uncomfortable situation at the beginning of the EPSE program when she received an anonymous review by her peers in the class.

“You have people giving you feedback on how they see you,” she explains. “It was overwhelming to hear from my peers that I lacked assertiveness. I never viewed myself as not being assertive. But when I received this feedback I set out to make sure I participated more during company meetings. I obviously needed to be heard more. As a result of my personal development plan set through EPSE, I am currently participating in strategic planning meetings for my company.”

By participating in EPSE, Brill also learned to think globally for her company.

“Knowing how my department affects the rest of the company globally is very important,” she says. “Having an understanding of the supply chain and knowing which part of the supply chain I am and how I effect the end result has helped me develop strategic plans for my team.”

Before taking EPSE classes, Brill was mainly involved with technical support. During her EPSE training, she was promoted to management, and now has three groups of engineers report to her. Snippets of knowledge she took from EPSE has helped Brill in her daily management role.

“There was a course that talked about not only fighting fires but also about how

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More than twenty managers from San Diego's top companies learn skills that can be leveraged in the workplace.

to make plans," says Brill, who holds a master's degree in aerospace engineering from San Diego State University. "That hit a chord with me. The department I started managing was always fighting fires and we needed to plan ahead and be proactive instead of reactive."

in charge of a project or department in a company.

"Their companies view them as people they think are going to make excellent managers," says De Spain, a trained engineer turned executive who spent more than three decades in the

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"I wanted to take advantage of this program and it's been important enough to me that I have passed it on to the people who now work for me," adds Brill, who recently sent one of her team engineers through the EPSE program. "It's a good investment."

About 20-25 percent of EPSE graduates are promoted to a higher management level. The typical EPSE student is an engineer or scientist who has been put

tech industry. "This is the only program I know where someone who is highly credentialed can come and get this kind of practical business knowledge. We're here to help them become better leaders and to teach them how to work with their people."

Before taking EPSE courses, Simon Kuo used to try to solve almost every problem using a technology solution. After EPSE, the engineer looked at

problems from multiple perspectives, and now communicates using the language best suited for the intended audience (i.e., finance directors, marketing department heads and other non-technical executives). Kuo is now able to effectively participate in discussions at the corporate level and help influence the strategic direction of his company.

"The people I interact with are all VPs, people who are responsible for profit and losses, and executive managers," says Kuo, director of engineering for Carlsbad-based telecom firm ViaSat. "They are looking for a set of issues that are outside many technical personnel's comfort zone, like finance and accounting, customer service, and marketing. Having learned about these topics in EPSE has allowed me to understand their perspectives. I can communicate more effectively with them. I can't always go to them and talk about a technical solution. I have to understand



Teammates from Northrop Grumman, BAE Systems, and Qualcomm build trust by helping blindfolded co-workers scale a towering wall.

where they're coming from and then see how my technical expertise can contribute toward the issues at hand, whether it involves an acquisition or an organizational change.”

Keeping his engineering teams in sync has also been a little easier since participating in EPSE. Kuo recounts the ROPES exercise, which involves scaling an 8-foot fence sans tools or ropes.

“This is truly a teamwork effort,” says Kuo, who has created ROPES classes for his ViaSat staff. “Having good physical ability isn't enough. In order for us to

“I learned the process of how teams function and how they are built.”

become successful, everyone has to get across that wall. It translates back to the workplace – people just can't work individually. The project is successful when the software and the hardware are both completed successfully.”

Dan Shawler, vice president of San Diego-based biotech NovaRx Corp., also believes that in today's technology and science fields, teamwork and collaboration are essential. That's why Shawler, a former cancer researcher at the Sidney Kimmel Cancer Center, enrolled in EPSE.

“I learned the process of how teams function and how they are built,” he says. “We did a teambuilding exercise at NovaRx that I actually did in EPSE. I was able to see how people react under stress. If you're able to see that, you can get in there and try to do something earlier. For a well functioning team you have to take advantage of your strengths and identify your weaknesses.”



Learning activities such as research assignments, simulation exercises, and planning projects are also part of the EPSE program.



Mymy Dao of Northrup Grumman uses the EPSE program to develop the mindset of a C-level executive.

The leadership skills Shawler learned from EPSE have also come in handy—NovaRx has grown from eight to 24 employees; the company plans to have 40 employees by 2007.

“Before I took EPSE I never realized there were actually skills involved in managing people,” says Shawler, who now sits on the EPSE Alumni Board. “For example, I learned that you can't motivate people. You can only give them a framework to hang their own motivation. I learned to find out what interests them and then bring them in alignment with your goals.”

“I have made some mistakes but I am getting better at this,” Shawler adds. “Learning how to manage a team and get a team functioning properly and efficiently are very important skills.”

To learn more about the Executive Perspective for Scientists and Engineers program, please call (858) 964-1336, email sbaranowski@ucsd.edu or log on to extension.ucsd.edu/epse