Being a good person also means delivering bad news in a “good” way. Especially with the economic problems of recent years, more and more managers have had to regretfully let employees go.

“If I’ve learned one thing about delivering negative news,” counsels Gualco, “it is to be straightforward and honest. People may not like the message, but they’ll appreciate the honest explanation.” Another tactic is what Gualco terms “bad news, good opportunity.” “Our world is littered with people who received bad news and turned around and found an opportunity,” he says. “If you don’t get a job or a promotion, it forces you to look for something else and that may be the job where you find passion. You may find out the reason you weren’t successful before was because it wasn’t something you really wanted to do.” People may not believe this in the beginning, but after some time and reassessment, they are likely to find that it turns out to be true.

Gualco advises those who strive to be managers to develop skills aligned with his six principles and encourages those who already are managers to reevaluate themselves according to these items. For organizations looking to hire good managers, he suggests creating an interviewing procedure and environment that would promote the demonstration of these traits.

Gualco also advises women to pay particular attention to the development of their leadership skills. With so many years in human resources management, he says we’ve seen the end of real tacit discrimination against women and that, especially for those who enter specialized fields such as engineering, it is the development of managerial skills that come in handy when trying to move up. “Don’t just think about your professional life,” he cautions. “Think about your whole person—who you want to work for and how you want to manage. You need all skills.”

With four books now published, Gualco is turning his focus to his fifth book, which will also combine professional development with interpersonal skills. Focused on labor relations, the author says the book will examine ways to be an excellent negotiator, both in the workplace and in life. After the guiding principles of The Good Manager have helped you expand your leadership and managerial talents, perhaps his new book can show you how to negotiate a higher salary that captures your true value.

—Leslie Prives

Reverse Bias

Teach, collaborate, and change the world

“Industry engineers are vocational.” These are the words that introduced me to the longstanding battle of the biases between engineers in academia versus engineers in industry.

The response came quickly, “We real engineers consider ourselves professionals that are solving real-world problems. Of course, you know the saying, those who can’t do, teach.”

As a witness to this battle, I was now holding back the laughter. I’d like to meet anyone who has ever gone through an undergraduate program without encountering a Ph.D. that couldn’t teach their way out of a paper bag. Note that having a Ph.D. is not a necessary and sufficient condition for being a decent teacher.

My second thought was, “Would you ever go to a doctor who never saw a live patient? Then why would we not want our engineers to have industry experience putting the theory into practice for the benefit of society?”

I’m considered quite an anomaly in the academic world because I came from industry to the university. Of course, showing up on campus in a pink suit and matching high heel shoes didn’t help me blend in either. Nevertheless, I have always continued working with industry and cannot imagine myself working any other way. If I didn’t have a real client application to target my research, I honestly think I would be bored. I also think the students in my lab wouldn’t be the most sought-after graduating students on the campus. Their experience working with our industry collaborators makes them ready to jump in on projects as immediate technical contributors upon graduation.

When interviewing for one of my industry consulting positions, I recall the manager setting the expectations very clearly. He said, “We expect that when you are done, you will deliver a working product and not some useless publication.”

This perception from the industry side considers academics as students who never leave the comforts of school and work in a vacuum. As an aside, I love to vacuum, not work in one, yet more proof that I am a walking anomaly.

Industry complains to universities that students don’t get enough “training” in valuable skills that can allow them to be immediate technical contributors. Universities fight back that skills are not “scholarly,” and that students are learning to be innovative critical thinkers.

Oh really? How can that be possible when the people teaching them have never been outside the safety of the walls of academia and have no idea what it’s like out there in the real world?

One professor responded, “Why do you keep saying we don’t live in the real world?” The response, “Because in the real world, you can be fired from your job, and you actually worry about economic downturns.”

At this point, I am ready to send the two sides into a dark room with rusty saws to fight it out.

How can one side live without the other? Industry needs fresh new perspectives that young engineers have to offer, while the universities need industry to help provide relevant experiences outside the classroom that exercise and strengthen everything that students learn from lectures, laboratory assignments, and team projects. Why is the concept of creating a synergistic relationship that is mutually beneficial for academia and industry so difficult for some people to grasp? Maybe because

Digital Object Identifier 10.1109/MWIE.2010.939084

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Building a WiEM Network

Mixing women and electromagnetics

The inaugural IEEE Women in Electromagnetics (WiEM) workshop was held on the campus of the University of Utah on 5–8 June 2009. Elena Semouchkina was one of three organizers of the international workshop.

The study of electromagnetics requires immersion in physics and mathematics, neither of which has attracted large numbers of female students. Semouchkina recalls being the only female in her electromagnetics courses, an experience many of the workshop participants shared. The WiEM workshop was an opportunity for young researchers, primarily though not exclusively female, to interact with established women scientists who offered both technical talks and advice on how to prosper in their careers. Male graduate students attended, but all of the presenters were women, among them some of the leaders in the field.

Both the technical talks and the career sessions were notable for their informality and the excitement that generated questions and discussions between the young researchers and senior scientists. For many of the younger women, this was a rare opportunity to meet with female mentors and colleagues.

“Those students, professors, and company leaders who participated at the workshop are now building a WiEM network,” Semouchkina says. “They are e-mailing, creating a Web site and a Facebook site, and we will soon have all of the lectures from the workshop online. It was very successful, and we will try to do this again every year.”

As one of the students put it in an e-mail to the organizers, “As I reflected on the workshop on my way home, I realized that the most valuable benefit that I have taken away is a feeling of support. I came to the workshop feeling alienated and left feeling part of a very supportive community.”

Semouchkina thanks the Material Research Institute at Penn State University for its support of the workshop. The University of Utah and the University of Central Florida sponsored her co-organizers and major funding came from the IEEE.

Career Advisor
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some faculty members need to take those internships themselves and see what is really going on in industry. Maybe we need to get the industry people into the classrooms teaching and sharing their experiences with our young people.

Good news, it is actually happening! IEEE industry engineers are among some of our local institutions’ best assets as adjunct instructors and campus research labs are now working hand in hand on industry funded campus projects. Guess what? No one has caught cooties for walking on both sides of industry and academe!

IEEE has helped academia by getting students to take on real-world challenges. Most recently, one of our own Boston student members won the “People’s Choice Award” in the IEEE President’s Humanitarian Challenge. I find it inspiring that this young man has touched millions of lives with his innovative work. He had to work with doctors, politicians, and social organizations to accomplish a feat that governments have failed to overcome. He knew no limits and worked around red tape that most others would have run away from. He has made all of us at IEEE very proud and we should be very proud of his mentors and academic advisor for encouraging him.

His advisor got it right and has learned to reverse the biases. Teach the engineering, get students to think outside the box, collaborate with industry, and change the world. Yes, his advisor definitely walks on both sides of academia and industry. What is more impressive is his advisor does it all in high heels.

—Karen Panetta