

Why Support DiscoverE?

Imagine visiting a school to talk about careers in engineering and being asked why anyone would want an engineering degree if jobs in the field are being moved overseas. This question has already been asked this school year of one of the DiscoverE engineers in Central Texas. The newspapers, magazines, TV and radio are all covering the stories of call center staff, programmers and electronic engineers losing jobs to lower cost operations in other countries. So how do engineering professionals answer?

First, think of the diversity of the profession. A water quality engineer may take samples, understand topography and impermeable cover, discover past uses of the land and interact with the public and governments. The HVAC expert needs to look at details such as square footage, window area, building orientation, and equipment usage when creating a heating or cooling plan. The mining engineer needs to determine where to take core samples, evaluate the results and ensure that excavation meets quality and safety standards. Other engineers may be trying to figure out how to create an interchange to merge old and new highways, resolve the foundation needs for a skyscraper, build automobiles that rely on alternative energy sources or create and build an environment on Earth that can be transported to a space colony. Just try the exercise that asks students to name an activity or object that doesn't involve an engineer and you'll get the idea.

Can all of this be outsourced? I don't think so. Will engineers always be as highly paid as they are today? Maybe not, but they will be paid better than people who don't have college degrees. That's true across all professions. Will engineering skills be transferable? You bet they will. Engineers learn above all how to define and solve problems and, unfortunately, we will continue to have those. Will our world and our children's world and our grandchildren's world benefit from engineers with new ideas and new ways of looking at old and new problems? I certainly hope so.

There are many ways to introduce students to engineering. You can visit a classroom, participate in a career fair, staff a table at science night, host a visit to your business, mentor a Future Cities or Texas BEST team, or work with MathCounts. Tips on how to get started are available at <http://www.eweek.org> and <http://www.mathcounts.org/>. The Discover Engineering Web site with games and material for students of all ages, <http://www.discoverengineering.org> is another resource. More experiments, including some in Spanish, can be found at <http://www.centexeweek.org>. This month when we are celebrating the profession and the accomplishments of our peers let's keep in mind that we need to continue to increase public awareness of the profession by working with students and parents to create a new generation of engineers.

