## Seeking Global Impact and Raising Social Awareness: the New Engineering Graduate

By David Rosowsky, May 2012



Our students want to save the planet. They join Rensselaer with a nascent perspective on the global challenges before us, the global risks we are exposed to as a people and a planet, and the power of our global connectivity. Our goal at the university is to develop those perspectives more fully and with benefit of a broad academic community. Following this generation defining passion, however, is not at the exclusion of a student's goals of finding a job and becoming successful. Once disparate, these goals are increasingly aligned and intertwined.

Not every student wants to work for a large multinational company after finishing their degree. Students graduating today are just as likely to be attracted to the opportunities afforded by a smaller firm, or the promise of a startup company, or even the lure of starting their own business.

Additionally, engineering students are no longer restricted to engineering jobs. They are just as likely to be attracted to the worlds of finance, medicine, and law. Our graduates are also increasingly entrepreneurial, in part due to exposure they receive in class and through extracurricular activities, and in part due to opportunities and successes they see around them every day. Students see their colleagues and recent graduates creating business plans, starting companies, building organizations, and in some cases getting wealthy. Underlying all of this is the new mindset in which graduates are increasingly seeking employment opportunities that offer a global dimension, a social justice dimension, or both.

The university is the setting where our students often get their first real exposure to topics of global connectivity and social justice. This intellectual, cultural, and social "awakening" is a critical part of a student's education and is just as important as their choice of major in propelling them toward their future – and informing the choices they will make both as professionals and as global citizens.

Global dimensions may include working across continents or cultures. For some this may mean working for a company whose global impact is measured in global sales. For others it may be measured in the solutions being created and implemented to improve global quality of life. Some individuals may covet the chance to travel and work internationally. Others may value the opportunity to work closely with partners in other countries, overcoming time zones, technology barriers, and cultural differences. Preparing students to work effectively in these ways requires that we provide meaningful experiences, exposures, and opportunities throughout their undergraduate education. At Rensselaer, we are doing this through study abroad opportunities, travel/learn trips, new degree programs and minors, student service learning projects, and course projects with international dimensions.

Social justice dimensions may include service learning locally or internationally, social entrepreneurship in an under-resourced community, or any projects that seek to close the technology gap and improve global quality of life. We provide experiences with social dimensions across both curricular and co-curricular offerings. These include design projects with a service learning or social entrepreneurship emphasis, service projects undertaken by our student organizations, and new courses and degree programs that blend technical, political, economic, social, and cultural topics.

We are challenging out students to change their neighborhood and community, not just the world. Our students are taking us to new places as we endeavor to keep up with their passions and their dreams. And our curricula, our degree programs, and our graduates are better for it.

---//---

David Rosowsky is the Dean of Engineering at Rensselaer Polytechnic Institute located in Troy, New York.