The Best Parts of My Day

From when I wake up in the morning to when I go to sleep at night I think about how to transfer my love and appreciation of science to growing minds. Early on Monday mornings I find myself in Bedford Stuyvesant, Brooklyn teaching approximately 100 energetic 6th and 7th graders about robotics, math, engineering, and science. As a National Science Foundation graduate teaching fellow, I have the fortune of teaching students STEM
subjects through experimentation and robotics upwards of ten hours per week in classrooms in this underprivileged area of Brooklyn. With my own mind currently expanding as a PhD student in materials chemistry at the Polytechnic Institute of NYU, I am proud to pay it forward by teaching children that may never have otherwise met a scientist or engineer or learned about these subjects. By teaching biology and chemistry through hands-on experiments I am able to connect these students to the scientific world, enabling the subject to jump out of the textbook and into their hands.

In addition to the in-class activities I design for these students, I also coach an after school robotics team at the school in Bed Stuy. This year we will compete against the rest of Brooklyn and later all of New York City in the FIRST Lego League competition, which consists of a robotics challenge, presentation of a scientific research project, and the strategic design of robots capable of performing specific tasks; all for a panel of judges. Robotics enables the students to work as a team and complete the same design processes engineers use in the professional world, opening their eyes to importance of science and engineering in the world they live in, and showing them how they can play an important role in shaping the future.

Twice a week at the end of the workday I have a different kind of teaching adventure. On these days I travel from my protein engineering lab in downtown Brooklyn to the affluent Upper West Side of Manhattan, where I tutor high school students in science and math. Despite their solid base in other subjects, my students are often lagging behind in science and math. I devote focused attention on making sure they not only understand the concepts so they can pass their tests, but constantly refer to real world examples of what they study in order to provide a sound relevance to these topics. On the occasions when I run over my allotted time due to my students' persistent questions on primordial soup and the origins of life, or how mathematical logic proofs can be used in areas like law, I know that it has been time well spent.
Between my time spent in the Bedford Stuyvesant classrooms, to the construction of robots afterschool, and all the way to my evenings teaching in the neighborhood of Central Park, the best parts of my day are spent connecting a million minds.