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Classroom in the Community: Learning through Service

President John F. Kennedy once famously said, "ask not what your country can do for you – ask what you can do for your country". This is especially true in the modern era of economic limits, where the preponderance of the population can use a friendly neighbor. The energy, enthusiasm, optimism and free-spirit of young people make us uniquely qualified to fit into this category of helpers; however, one of the ubiquitous challenges we face is time-management. For many of us, time spent in the community comes at the cost of time spent doing homework or studying for exams. The solution to this predicament lies in the burgeoning field of service-learning -- community service activities directly tied to one's academic goals. For the melioration of our future, we must work towards a world where service-learning is universally viewed as bolstering traditional academic curriculum by making the next generation of scientific leaders proud stewards of their local communities.

Where do we fit into all this? Nowhere is service-learning more relevant than the STEM fields. The deficit in the number of students pursuing STEM fields is alarming and has led to a colossal number of unfilled jobs in the US over the past decade- even in years of economic downturn. We can reverse this trend by providing an example for the rest of the country through service learning. Specific activities may include performing demonstrations in local classrooms, organizing college campus visits to STEM departments, tutoring K-12 students, and engaging social media to make science and math cool. Our faculty can play a pivotal role to engender this change by buttressing us through activities such as providing K-12 academic or visual demonstration curriculum derived from their research for use in outreach activities.

However, a critical component of such a movement is the buy-in from the private and academic sectors. Educators must be willing to see the academic benefits, to the college student, of community service. For example, explaining the fundamental concepts of why liquid nitrogen causes a balloon to deflate to a 8th grader has immense pedagogical value when learning the complex statistical mechanics underlying the ideal gas law. Similarly, employers must see the application of classroom learning in a practical setting as a significant addition to one's qualification towards an industrial position. Without a plethora of support, young people will quickly get discouraged, and its debilitating effects will be felt decades into the future. This is the time for academia, industry and government to come together to engage youth in new and unique ways and UC Berkeley's College of Chemistry will certainly play a paramount role in making that happen.