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As a science educator, Laura Schramm, Ph.D., knows first-hand how important it is to attract children, especially girls, to the profession. In an effort to do exactly that, the Biology Professor partnered with a troop from Girl Scouts of Nassau County, Hicksville division, for a four-week science workshop in which kindergarten to high-school girls examined cell biology and the basic structure of DNA.

In the Academic Service-Learning (AS-L) component of her Molecular Cell Biology course, Dr. Schramm welcomed the troop to the Queens campus each Saturday in November to hone their knowledge of biology and generate interest in science as a profession.

The AS-L project grew out of the Girl Scouts of America’s participation in the Science, Technology, Engineering and Math (STEM) Education Coalition’s efforts to promote gender equality and generate excitement in those areas among girls. It was the perfect endeavor to spark the scouts’ interest and had a dual purpose: the visiting scouts would gain valuable insight into basic scientific methodologies, while the St. John’s undergraduates would discover the role of educator as they turned classroom lectures into practical experience.

“I truly valued the fun-filled weeks with the scouts,” notes Senior Kevin Hughes. “The experience made me realize the impact teaching has on others and how the application of science starts out very basic at a young age and gets more detailed as you continue throughout your educational experience.”

A Pilot Program
Academic Service-Learning, as a course component, continues to expand at St. John’s University. This experiential learning helps students to learn faster, retain information longer and better understand classroom theories and attempt to create sustainable change for the better of the community.

The Girl Scout initiative—a new addition to the AS-L portfolio—allowed the science students to interact with younger children, conduct DNA workshops and science demonstrations, construct design worksheets, and grade assessment tools. The incorporation of classroom pedagogy in a real-world environment was illustrated as students dissected household items such as beans, detergent and shampoo in order to create easy, fun means of instructing the younger generation.
Biology major, Kelly McConnell confides that “when learning is not so much of a chore, we are able to make science interesting, applicable and fun. In my experience working with the girls, I have not only been able to share the gift of knowledge but I have also encouraged them to pursue science as an area of interest.”

Dr. Schramm acknowledges the effectiveness of the AS-L Office in its ability to cultivate a spur-of-the-moment idea into a realistic program within a matter of weeks.

“The girl scout’s mission is in line with our Vincentian mission,” says the Biology Professor. “By partnering with this organization, we have exposed these young girls to a hands-on approach to learning science. In turn, we have given our students the opportunity to discover non-traditional means of service within their profession of choice.”

As with all AS-L courses, students were responsible for writing a reflective journal on their experience at the conclusion of the semester. Students with the best papers will be selected by Dr. Schramm to present at next year’s Student Research Day.