

# A Collection of gifts



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## Great Ideas For Teaching

### 19.3 Solidifying Concepts and Developing Soft Skills Through Community Outreach

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In my experience, students are often intimidated by laboratory-based science courses. While there is an excitement about experimentation, the fear of making a mistake or running out of time tends to take over.

While trying to deal with this issue, I thought back to a 2011 article in the New York Times describing the trajectory of science students. According to the article, middle and high school students have an excitement for science which “quickly fades as students brush up against the reality of [college science courses].” Some of the suggested remedies for this growing problem include incorporating more hands-on projects and providing non-graded opportunities to practice.

Community outreach is a great way to provide students with a hands-on activity that will allow them to practice their science skills in a less stressful environment. I pitched the idea of community outreach to my junior-level students in an advanced biotechnology lab-based course and only heard from a few interested students at first. After discussing ideas with those students, we made a plan for our community outreach event: host a science workshop for middle school girls during the 2018 Girls Tech Conference at MCC.

By the time we had made this plan, more and more students in my course had begun to express

interest in helping out, and, on the day of the event, more than half of the class showed up to volunteer.

Not only did these student volunteers have a chance to solidify their knowledge of science concepts by explaining them to middle school students, but they were also able to practice soft skills that are often lacking in science graduates. A recent Forbes article ranked teamwork, critical thinking, and public speaking as crucial skills for landing a job in any field. The student volunteers were able to practice these skills as they worked together to teach the middle school girls and solve experimental issues that arose.



Many of my students ended up applying for jobs and internships later on during the semester and nearly all of them chose to describe the skills they developed during their community outreach experience in their applications.

In summary, community outreach is an enjoyable way to help students solidify classroom concepts and work on their soft skills. To be most successful, the outreach activity should allow students a chance to do hands-on work in a relatively low-pressure, non-graded environment. 🎁