The Little Shop of Physics: Lessons from Informal Science Education for the College Classroom

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The Little Shop of Physics is a hands-on science outreach program of the Physics Department at Colorado State University. We have been presenting programs at schools and workshops for teachers for over 20 years. All of our projects are developed by undergraduate students at Colorado State University, who also present our school programs. Our interns and volunteers receive very valuable experience in science and communication; the Little Shop experience is an important component of the college experience for these students. Over the past several years we have begun a thorough assessment of all aspects of the work we do that has given us valuable insight into what works and what doesn’t in our interactive, informal physics education programs. These lessons can be easily adapted to the college classroom. In this session, I will begin with an overview of the Little Shop of Physics program, including how we involve undergraduate students in all aspects of our work. Along the way, I will share some easy-to-reproduce demonstrations that came out of the Little Shop that I have found to be very effective. I will then discuss our assessment efforts and the lessons we’ve learned about presenting science concepts to students that have informed and improved my college teaching. At the end of this formal presentation, we will give participants a chance to explore our hands-on science projects, and to ask questions of the Little Shop of Physics team members in a more informal setting.

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