Little Shop of Physics (LSOP) first visited the Pine Ridge Reservation back in 2008. Since then we have gone back to the reservation every year; in some years, we make multiple visits. Pine Ridge is home of the Oglala Lakota people, and in 2013 a tribal proclamation decreed that every year the fourth week of November would be Oglala Lakota Nation Little Shop of Physics Week. While at Pine Ridge we have hosted numerous teacher workshops, and we have visited every school on the reservation at least once. LSOP has also hosted groups of students and teachers from Pine Ridge at Colorado State University (CSU) for education, professional development, and to facilitate construction of their own traveling hands-on science program based on the LSOP Traveling Science Experience.

Over the years LSOP has cultivated relationships with various groups—both on and off the reservation—to foster deep connections with the students and teachers of Pine Ridge. As in previous years, the LSOP Traveling Science Experience set up experiments at two different schools early in the week prior to the Thanksgiving holiday. During these school visits—which last for the entire school day—we work with students in small groups and see every student at the school. These visits involve significant interaction with the LSOP crew, as well as with volunteers of Native American heritage from Oglala Lakota College on the Pine Ridge Reservation and the CSU Native American Cultural Center. We also involved the CSU Science Outreach Scholars, a group of first-generation freshmen students who have an interest in science outreach and giving back to the greater community.

This year, over the course of two days, the Little Shop of Physics set up at Wolf Creek School and Batesland Elementary School, and worked with over 1,000 K-12 students from these two schools as well as visiting students from Wolf Creek High School and Porcupine Girls School. Each student had the opportunity to explore our 100+ hands-on science experiments, interact with volunteers from their community and from CSU, and learn about opportunities to further study STEM in college. Additionally, each student received an age-appropriate Halliburton Science-at-Home Kit, which contains Halliburton-branded rainbow glasses, and either a UV color-change bracelet or an LED circuit kit.

Not only did this experience have an impact on the K-12 students, but it also affected the students from Oglala Lakota College and CSU. Many of these college students have experienced challenges during their pursuit of higher education, and they were able to connect and empathize with the students of Pine Ridge in real and significant ways.

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