

An educational alliance between NMT's Petroleum Engineering Department and Socorro's Cottonwood Valley Charter School was formed this fall. For several months a group of New Mexico Tech students in Petroleum Engineering has been working with mid-school students from Cottonwood Valley Charter School in Socorro, New Mexico, to better understand energy. NMT students Breanne Dunaway, Robert Blakney and Scott Engler helped 7<sup>th</sup> and 8<sup>th</sup> grade students learn more about energy through several hands-on activities, including building solar powered cars. They also helped construct internal combustion engines (models) as shown in the photos below, and helped teach the students the basics of movie making and editing.



Clockwise starting from top left: Scott poses with Leah Guengerich and Nancy Bohling to show off their completed model. This complex undertaking had moving pistons and rods to model the action of a real engine. In the next photo Breanne works with Bryan Melanson and Kelly Wang as they assemble their engine. Last, but not least, Robbie works with Mirjana Gacanich and Cassie Parker as they are putting the finishing touches on their piston assembly.

This work was partially funded by the BP's A+ for Energy Grant Program, a BP Energy Education Program. The objective of this program is to provide K-12 teachers with resources for teaching students about energy and energy conservation, promote connections between schools and the community, and provide opportunities for students to take a leadership role in their own education.