

The welding program at Kutztown High School is housed in a part of the school that looks much the same as it did in the 1960's and 1970's. A visitor might easily overlook this area that I have come to see as one of the most defining and challenging of my three years in high school. This area is run by teacher who has always taken the time to help students improve their technical skills and challenge us to do more and go farther than we think we are capable. This is my second year taking this class. I have had the opportunity to use the resources we have had available to develop not only my skills in welding, cutting, and fabrication but also in leadership and problem solving. The limited machine and material resources that we have for the class has demanded that we hone our problem-solving abilities to stretch the resources farther and complete processes and practice in alternative ways in order to build our skills and meet our project goals.

I was able to combine my passion for photography, my skills from class, and the CAD that I learned last year to develop and build a custom camera mount. I worked through the design process in order to develop ideas and designs that went from a two-dimensional drawing to a three-dimensional model in AutoCAD before I built the mount from recycled metal that we salvaged from a table tennis frame from off a metal scrap pile. This experience has positively influenced how I think about the engineering design process and my technical abilities.

Last year, we had students from a school in Philadelphia visit our high school. They were all from the city and none of them have ever had the opportunity to weld. Our class took the time to share with them what was probably a once in a lifetime chance to MIG weld. This opportunity to share the experience with others has further impacted my outlook on the chance I have had to develop my technical knowledge and skills; as well as my ability to teach and lead others. A few of my fellow students and myself from last year enjoyed the opportunity so much we have returned for a second year. We have had the opportunity to peer teach the new students, under our teacher's guidance, and this has made me a much better welder and person. I am able to watch students, younger and older than myself, learn a skill that I am very passionate about, and I know that I helped them achieve this.

I have learned through this class that I can and will succeed in life despite the many challenges and limitations that I face. The opportunity for us to build our character, impact those around us and share positive opportunities and develop our capabilities has already started here in Kutztown and we would believe that this opportunity would enhance our abilities as we strive to make a difference.