

Double Exposure Ari Bernabei, Physics Taya Chase, Math Juli Ruff, Humanities Ninth Grade High Tech High

Students explored the questions "What pictures tell a story?" and "How do we tell the WHOLE story?" through an integrated Math, Humanities, and Physics project. Students created graphic novels, pinhole cameras, photo journals, identity cards, and more!

In Math, students created their self portraits using hundreds of linear and quadratic equations. They then annotated their portrait by solving intersecting lines using substitution and elimination. They looked past just what the eye can see to get a better understanding of the story behind every image.

Teacher Reflection

This project challenged students to examine their identities and the world around them through photographs. One of the things students made was a tri-product that included a Desmos Self Portrait, Annotations of the portrait and a Dear Math letter. What I found inspiring in the students' work was their dedication. Since the portrait was personal to each individual, students spent a significant amount to time ensuring that their image represented the story they wanted to tell. They also mastered the linear equations math unit because the self portrait required them to understand slope, y intercept and how to solving the equations of the intersecting lines. I was astonished by each and every one of their final products.

—Taya Chase

Student Reflection

This was my favorite assignment of the semester. We started it off by going on a field trip to the Balboa Park Photography Museum. After taking a look at the museum, we took self portraits. These self portraits were the foundation of our main product, the desmos self portrait. We created these by going on desmos.com and inserting in our portraits. Then over the course of a month we outlined our portraits using linear, circler, and quadratic equations. We then followed up our portraits with annotations. These annotations solved for the intercepting points of three sets of two equations using substation and elimination. Finally we wrote a letter to math. This letter expressed how we feel about our relationship with math.

—Audrey

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