A project led by Mr. Kurada in collaboration with the creative children of Room C2
University Elementary at La Fiesta
2015 - 2016 School Year
The project began with us noticing a big "spider web" reflection on the wall.
We then explored devices such as an overhead projector, light boxes, and a movie projector.
We investigated shadows on the playground by drawing and writing about what we noticed.
We created "action figures" of three different heights; short, medium, and tall. We learned how shadows change based on height.
We then measured our own shadows and recorded the time of day we drew them.
"Look! We made the longest shadow!"
Later in the project, we learned about transparency and how light can pass through clear objects. We designed, built, and measured transparent sculptures.
We experimented with aluminum foil and made relief works. We took them outside and placed them in the path of sunlight. We learned that light can bounce off reflective material.
We investigated prisms. We learned about refraction and how light bends as it passes through different mediums such as glass or water.
We explored long exposure photography to help us learn that objects in the dark can be seen with light.
Sonoma State University's Physics Department visited Room C2. They taught us more about light including fiber optics, ultraviolet light, and how light waves work.
We organized an exhibit for the school community to showcase and explore what we learned about light. We are very proud of our work!
Educational Academic Standards Which Were Addressed During the “Light World” Project

Next Generation Science Standards

Waves: Light
1-PS4-2: Make observations to construct an evidence-based account that objects in darkness can be seen only when illuminated.
1-PS4-3: Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light.

Common Core English Language Arts Standards

Writing
W.2: Write informative/explanatory texts.
W.7: Participate in shared research and writing projects.

Reading for Information
RI.10: With prompting and support, read informational texts.

Common Core Mathematics Standards

Measurement and Data
MD.1: Order three objects by length.
MD.2: Express the length of an object as a whole number of length units.
MD.3: Tell and write time in hours and half-hours.

National Core Visual Art Standards

Creating
Cr.11: Explore uses of materials and tools to create works of art or design.

This project addressed the Next Generation Science Standards, Common Core English Language Arts and Mathematics Standards, and the National Core Visual Arts Standards.
I would like to express my appreciation to the wonderful Room C2 families for their support and collaboration throughout this project.

Special thanks to the Voyles family for constructing the mirror tent and the SSU Physics Department for visiting our classroom and donating equipment. May this project inspire a life-long curiosity about light.