

## TERRIFIC SCIENCE VIRTUAL CAMP

When we received the heartbreaking news that Tech Trek 2020 had been cancelled due to the coronavirus, we needed to rethink how to inspire our high achieving 8<sup>th</sup> grade girls to pursue STEM (Science, Technology, Engineering, Math) education and careers. For over 20 years, AAUW Healdsburg had sent our Tech Trek scholarship winners to AAUW's Tech Trek Camp Curie, a one-week residential STEM camp at Stanford. Since middle school is the age when girls significantly lose interest and reduce their participation in STEM, it was critical to offer the girls selected to attend Camp Curie 2020 an exciting alternative STEM experience. Terrific Science Virtual Camp (TSVC) was created to fill this role.

- *"I had a lot of fun! It was super fun doing all the experiments on the zoom and with my friends and family. Thank you for letting us join this experience!" Izzy*

A month before camp began, we engaged and challenged all nine 2020 Tech Trekkers to figure out the science of a famous magician's trick by posting weekly videos on the Terrific Science website ([Science Vs Magic](#)). Seven of the nine girls then signed up to attend TSVC!

The camp instruction was led by 2 women scientists: Mickey Sarquis, a retired Chemistry Professor who developed the curriculum and wrote the "Lather Up" activity handbook used at camp, and Nancy Andrews, a retired Environmental Scientist. A box of the science experiment materials was delivered to each camper's home.

- *"I did like camp. I liked how we got to meet everyone. I won't change anything because it was all fun." Griselle*

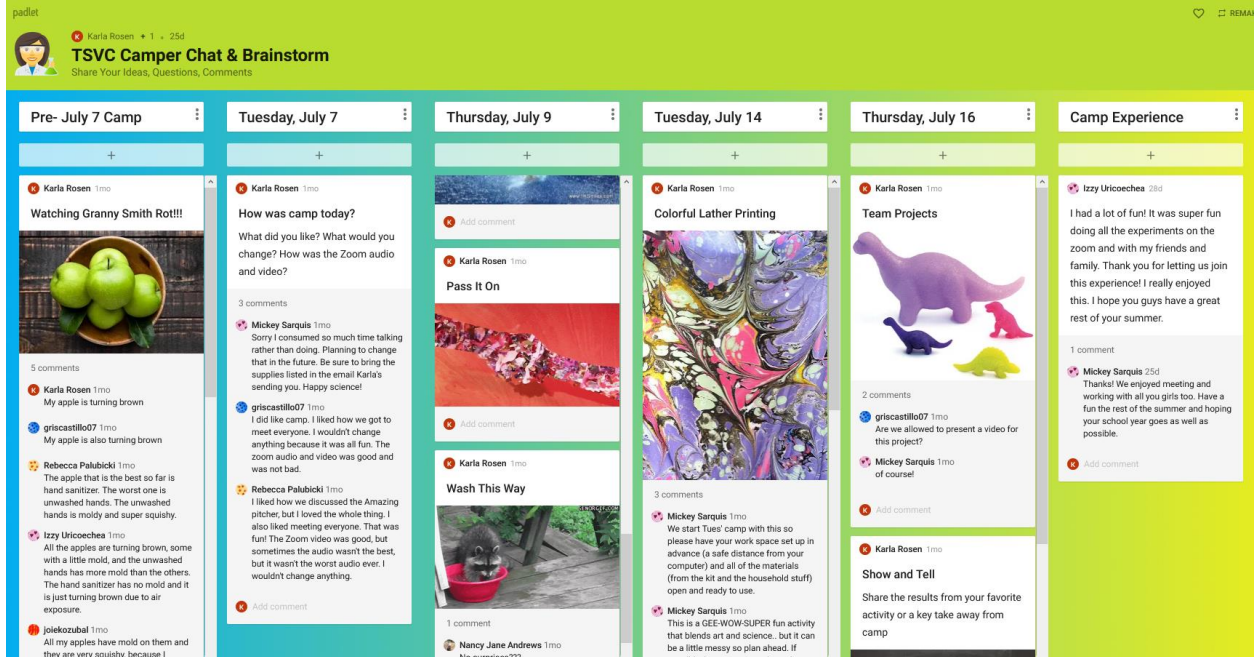


TSVC activities consisted of four 1 hour Zoom sessions and several safe, fun, do-at-home science experiments, readings, and discussions. Our campers employed the scientific method to discover the science behind the coronavirus-related hand-washing techniques, disease transmission, microbes, super

germs and antibiotic resistance. In addition, the campers blended art and science to create glycerin soap and colorful prints using shaving cream and food coloring.

- *“All my apples have mold on them and they are very squishy, because I started them on the 2<sup>nd</sup> of July.” Joie discussing the results of her Watching Granny Smith Rot experiment.”*

Padlet, a bulletin board app, listed the daily curriculum and provided an interactive space for the girls to discuss the experiments with each other and the TSVC committee.



- *“I liked the experiment that we did. It was super fun! I showed it to my brother and he said it was awesome. He loved it and was interested on how it worked.” Rebecca*

For the final project, the campers were challenged to use the scientific method to learn about the properties of Grow Dinos and then make a 10-minute presentation. The campers showed amazing creativity, demonstrated an excellent understanding of new scientific concepts and worked virtually and collaboratively with teammates from other schools. Below are 3 slides from one team’s presentation.



## Research

The growing dinosaurs are made out of a super absorbent polymer that soaks up all the water you put into it. The polymer they use in the dinosaurs are like the non-toxic chemical they use in the baby diapers. Growing dinosaurs grow to about 10 in (25 centimeters)



## Joie's Lizard

For the first 7 hours Joie kept the lizard in warm water. After that she put it into room temp. water.



Day one/ at start: 11 inches long



Day three: 18 inches long.



Day t

Many thanks to the Terrific Science Virtual Camp committee (Mickey Sarquis, Nancy Andrews, Karla Rosen and Kerry Weiner Elkind) for their vision, dedication, creativity and record setting implementation of TSVC! I would also like to thank the Tech Trek committee (Liz Loebel, Katherine Lacy, Diane Meyers and Sharyn Sarquis) for their professional and caring interaction with the schools, teachers, girls and parents to select these remarkable campers.

A special thanks to Terrific Science, a company that provides quality, standards-based science instructions to elementary through college science teachers. Their generous donation of materials, expertise, and website hosting enabled us to create and implement Terrific Science Virtual Camp.

Looking ahead, by building a cohort of the 2020 Tech Trekkers, TSVC will be the jumping off point for a Tech Trek Alumni Group. Please contact me if you are interested in participating on this new committee, Tech Trek, or other STEM related activities.

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