BACTERIA AND YOU

9th Grade Biology, Mary Kraybill
9th-12th Grade Culinary & Hospitality, Larry Singer
AMERICAN CANYON HIGH SCHOOL

This is a beginning of the year project that focuses on bacteria, cells, and microscope usage for Biology, and kitchen sanitation and health in Culinary. During the project, Biology students swab the kitchen for bacteria before cleaning, then clean that surface, and swab again. They then culture the swabs and grow the cultures on Petri dishes, analyze the bacterial cultures, and share their findings with the Culinary students. Biology students also study cells, organelles, and microscopy. Culinary students learn the techniques of sanitizing a kitchen for food preparation. The project culminates in a handbook collaboratively created by Biology and Culinary students focusing on kitchen sanitation and the bacteria that can affect our health that might be found in the kitchen. As part of the process, Culinary students give how-to instructions on cleaning and sanitizing in the kitchen, and the Biology students each do a study of a different pathogenic bacteria that might be found on food or contaminated surfaces.

Teacher Reflection
Biology: After reflecting on the project and accomplishments, my overall impression is that it was a good learning experience for the students, and a nice way to touch base with a different subject area and other students. The students learned bacterial swabbing, culturing, and slide preparation before learning about microscopy. It was good to culture and see bacteria that was in their own environment, and in a kitchen environment.

Student Reflection
I liked doing the project because it helped me understand what bacteria is. At first I didn’t know what effects bacteria could have on us. After doing the project I learned a lot, like we should be washing our hands, and cleaning our kitchens more effectively, especially with bleach. I think more students are engaged with the growing of the bacteria and understand what it is. I think other students learned a lot also.

— Monica