

CTE FOUNDATION AWARDS PINER HIGH \$10K ENHANCEMENT GRANT FOR PATIENT SIMULATION MANNEQUIN !

The **Health Science & Biotechnology** program at Piner High is thrilled with their new addition, Susie 901, a mid fidelity clinical nursing mannequin. This android device can be programmed such that HSB students can measure pulses (in 5 different places) take blood pressure, insert foley catheters, conduct a breast exam and more! There are also 10 programmed scenarios for students to work as a team to examine and treat in real time. These scenarios range from an asthma attack to myocardial infarction (heart attack) with the mannequin providing feedback on CPR efficacy and she can also be shocked back into a normal heart rhythm. In attendance was now retired teacher, Judy Barcelon, who was instrumental in writing the grant, who commented on how we all felt euphoric to actually see Susie in our lab, being used by students and teachers and all the enthusiasm and potential that she brings to our program.



Teachers and a student team from the 3rd year HSB class were trained using the mannequin and “super excited” to be charged with creating the introduction of Susie to the rest of the class. Mr. Mantoani, who teaches both year 1 and 3 sees this simulator as a way for students to get more comfortable with patient physical interactions ranging from taking an accurate blood pressure to inserting needles for an IV or IM treatment. He is planning on using Susie during his next curriculum unit on Cardiovascular health to have students set up and interpret electrocardiograms (EKG). One of the many assets of this model is that there is streaming audio so she can state symptoms and give real time feedback both programmed and with input using a headset. She is completely editable, so that teachers can change the vitals during a scenario or teaching lesson to give students an opportunity to react, collaborate, and problem solve in the moment as they practice evidence based medical care. Susie is also anatomically correct and comes with accessories that will provide opportunities for students in HSB 2 to conduct physical exams during their cancer unit.

Students were beyond enthusiastic to see all the different options available for patient care. Emily Torres wants to become a family physician and appreciates that Susie can help her cover the basics of an initial medical exam as well as put her to the test of understanding an emergency. Yakez Brown was intrigued by the inner workings of the android device and how it can be programmed which fits with his goal of becoming a biomedical engineer and it was exciting to learn there is a technical career path to become a Certified Healthcare Simulation expert.

Next steps include setting up workshops with local Healthcare professionals to guide students through the simulations, acquiring the necessary supplies for ‘Susie’s Medicine cabinet’ such as IV tubing, catheters and colostomy bags and raising money to buy accessories such as the virtual monitor to display Susie’s vitals to a projector and other inserts such as the breast examination training kit. If you can participate in any way, please contact Mark Mantoani at mmantoani@srcs.k12.ca.us.