

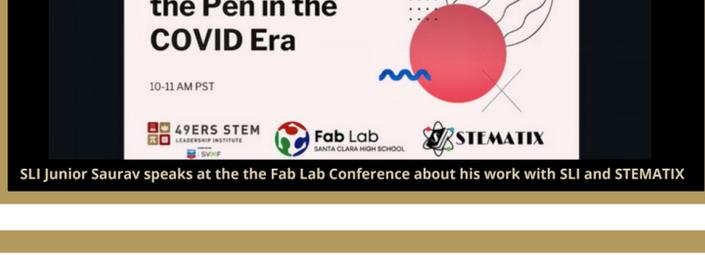
49ERS STEM LEADERSHIP INSTITUTE

MONTHLY UPDATE



PROGRAM UPDATE

Welcome to the 2020-2021 school year! What an interesting year it's been being in distance learning. The 7th and 8th grade students are diving right into coding and online robotics. Meanwhile, the 9th and 10th grade students have started the year learning a new CAD tool as well as digging deeper into the Scientific Process in preparation for the Fall Science Fair projects. In their recent Extended Hours, the 11th graders broadened their communication skills and understanding of the brain, while 12th graders dove into college applications and the copious resources in Naviance. Both Juniors and Seniors are learning tools for wellness and managing stress. Be sure to check out the Shout Out section at the bottom to see some of the amazing ways our students are benefitting each other and the community during these interesting times.



SLI Junior Saurav speaks at the the Fab Lab Conference about his work with SLI and STEMATIX

7TH GRADE

SCIENCE

It has been a crazy couple of weeks coming back to school. Students have been amazing at adapting to this new "normal" and have done a great job staying engaged. We have been focusing on learning and relearning some foundational concepts such as variables, graphs, and the scientific method before we jump into our first unit of Matter, matters!
- Ms Rahman

MATH

I am excited about the new school year despite the constraints and imperfections that come with distance learning. Challenges are opportunities in disguise. I have emphasized to the students the importance of practicing good study habits. For example, students should clear all outstanding assignments weekly and be proactive in asking for help when needed. We have just started on Chapter 2: Solving Equations. - Mr Tsang

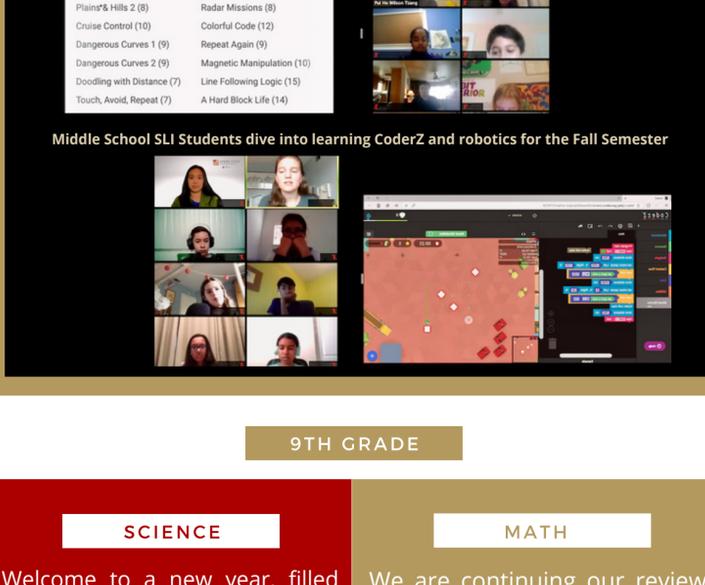
8TH GRADE

SCIENCE

Digital teaching to digital natives has been quite an adventure. The students have provided good technical support and offered much grace as we are trying out a lot of new tech tools. We've been busy learning the language of science and how to "Do Science." Students drew scale models of themselves, investigated the California Wildfires, and have performed their first at-home experiment. Our unit on Change over Time is next. - Ms Scilingo

MATH

We have made a good start tackling the curriculum despite distance learning and have finished chapter 1. As I have stated at back to school night, I intend to go straight through the textbook chapters. We are currently in chapter 2 and students are getting their very first experience with proofs. Hopefully we will complete at least five chapters before the end of semester 1. - Mr Lillie



Middle School SLI Students dive into learning CoderZ and robotics for the Fall Semester

9TH GRADE

SCIENCE

Welcome to a new year, filled with new learning opportunities. After reviewing the Scientific Process the students were given their first big project of the year: developing a field guide to Santa Clara's plant and animal life. You should expect to see them walking about the yard taking pictures and notes to be used in our publication. As we progress we will examine Botany, Ecology, and Evolution. - Ms Miller-Moody

MATH

We are continuing our review of foundational level Algebra 1 topics from 2 years ago. Introduction to the z axis, systems of equations, and solving life and business situations will come next. Students are doing great with distance learning, being patient with me as I am learning new applications, and collaborating. - Ms Spector

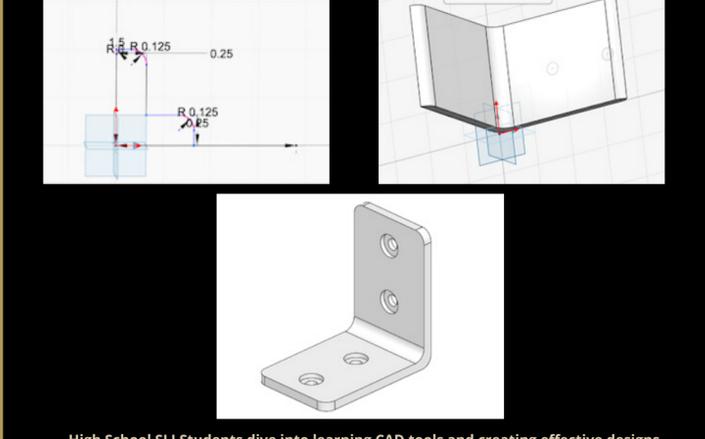
10TH GRADE

SCIENCE

We just finished our first unit on scientific foundations. Topics included: the scientific method, the metric system, significant figures and density. Even though we aren't in the classroom, we have virtual labs! The best part of virtual labs: it's easy to clean up! In our second unit, we will start looking into parts of the atom, the different families on the periodic table and how it's organized. - Mr Tan

MATH

Having spent the first two weeks of school reviewing our summer assignment, the class will now start to settle into a more typical routine that includes taking notes and working on classwork in small groups. Students should be starting to get a feel for the mathematical notation and the conventions I'll be looking for as the year progresses. Thank you all for your patience with our new way of working!
-Ms McClennan



High School SLI Students dive into learning CAD tools and creating effective designs

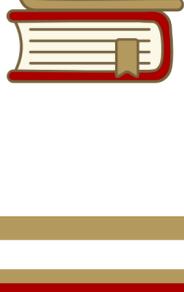
11TH GRADE

We've covered a lot of territory already in AP Seminar. Students have learned to assess the credibility of digital media & the RAVEN method of source analysis. They have also learned how to analyze an author's argument & assess the line of reasoning, credibility of evidence, implications, & multiple perspectives of the argument. In teams, they have presented case studies to solidify their argument analysis & presentation skills. Currently, they are forming groups for the mock Performance Task 1 (PT1). PT1 is one of the three college-board assigned tasks & determines 20% of the overall AP grade. While the actual PT1 is in December, we do this mock PT1 to hone the required skills.
- Ms Sunkara



12TH GRADE

In AP Research, seniors continue their exploration of research topics and identifying a gap in their body of knowledge. They have learned about ethical research practices in order to conduct research that follows federal guidelines. Currently they are compiling annotated bibliographies to help the situate their topics in historical context, identify seminal texts, and collect important peer reviewed articles. To equip them with the knowledge and skills needed to conduct collegiate-level research, we will be reading much of our textbook, Practical Research. Soon, they will present their research problem to their cadre groups for feedback.
- Ms Flowers-Rossner



SHOUTOUTS

- To the amazing team of students that have been TA'ing and teaching **CAD sessions**: Sherif, Boz and Joshua, Vivek, Nithya & Jenna
- The wonderful group of high school students teaching **CoderZ** to middle schoolers: Jenna, Thomas, Russell, Anishka, Arthur, Medha, Shreya & Saurav.
- Congratulations for Shailee for running career readiness forums with her organization, **Shape Your Future** (ShapeYourFuture.us)
- Well done Kaitlyn B and Isha for creating **Evolve**, a forum for college and career prep (EvolveSC.org)
- A big shout out to Saurav and the whole stellar STEMATIX team for the **STEMATIX Labs**, a week of workshops around career interests
- Check out **Blue Bloom**, a nonprofit helping high school students give back to younger students with special needs. This organization was started and is run by SLI students Akshita, Pranathi, Vyshnavi, Rhea, and Neha. Amazing job! (BlueBloom.us)
- Looking for some help with tutoring? Check out SLI Students Rishab and Ayush's **YouTubeTutor**, which provides high school tutors to K-12 students for free! (YouTutorBA.org)