SISTERS 2021-2022 Annual Report

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This Year's Progress:

Inspire Her Mind: The SISTERS Project for the academic year 2022-2023 collaborated with RUSD's Inspire Her Mind Group during Fall Quarter which hosted two sessions: November 8th & 9th and November 16th & 18th. We had Female Science Ambassadors manage the small breakout rooms where female high school students in RUSD would learn how to create the science experiment of their choice and then also understand the science that supports the experimental designs. The students had the chance of choosing one of the following experiments: Rock Candy, Compost, Lava Lamp, Oobleck, and Rube-Goldberg Machine. After, the experiments were conducted the students had a chance to ask the science ambassadors questions about higher education, financial aid, research, etc.

Bi-Weekly Meetings: For each meeting, we created flyers using canva to send out to Science Ambassadors and the RUSD teachers to send out their students. In addition, we also created a dropbox where Science Ambassadors were able to submit videos showcasing their days as college students to show to the RUSD students. We had five presenters speak to the students about various STEM topics and the students had the opportunity to learn about a diverse array of STEM fields and asked questions as well to the presenters.

- <u>4/13/22:</u> Introductory Meeting to the SISTERS Program with a presentation on the introduction of each of the SISTERS Leaders, frequency of our meetings, the time we will be conducting meetings, what we have planned for the quarter, and a Q&A.
- 2. 2. <u>4/27/22: Sydney Ghoreishi who is a Ph.D. candidate at Johns Hopkins</u>

University presented to the girls using an interactive presentation where students were able to use a program called Benchling, Through this program students were able to observe genomes and the effects of plasmids by inserting a plasmid into bacteria to make it smell like a banana.

- 3. 3. <u>5/11/22</u>: Hosted a STEM undergraduate panel with interactive Q&A where two female science ambassadors presented their research on the topic of Silicon Nanoclusters' impacts on cell phones and the topic of Autism and Acute Aggression. Our other presentation spoke about how students can get involved in research at a young age, and continue to pursue it during college as well.
- 4. 4. <u>5/18/22:</u> Dr. Yaekel and undergraduate student Camille Korbut presented from the UCR Mathematics Department on the topic: "A Mathematical Stroll In Paris." This was an interactive presentation where Dr. Yaekel and Camille Korbut showed the UCR SISTERS Team an activity that explained Euler Paths and Euler Circuits. RUSD students were not present at this meeting as they had to submit their Chromebooks before their last day of school so they were unable to join the meeting virtually, but we will be collaborating with Dr. Yaekle and Camille in the fall.
- 5. <u>6/15/22:</u> Chancellor's Research Fellow Karla Hernandez spoke to the students about her transborder experiences and how she interviewed students who were going to school in Calexico and had to cross the border every day to go back to their homes in Mexico. We worked with the ELD students who had lived in the US for 1-3 years and were engaged in the presentation and were asking and answering questions throughout the presentation. We got very positive feedback

from the RUSD ELD coordinator who wants to collaborate with SISTERS in the fall as well.

Newsletters:

We created one Newsletter for April using Canva. The Newsletter included an Introductory Message about the SISTERS Mission. Articles from Female Science Ambassadors, SISTERS events hosted in April, Book Recommendations, and finally a section of Thanks to all our donors and supporters for helping our program out. Hours: This year SISTERS met for a total of 10 hours. We had about 2-5 RUSD students participate in the meetings and for our meeting on 6/15, we had about 60 students participate. We had anywhere from 2-8 Science Ambassadors participate at our meetings as well.

Plans for the Upcoming Academic Year:

This year we were fully online, but next year in correspondence with health guidelines we plan on transitioning to a hybrid setting where we will host meetings virtually but will be having interactive field trips, experiences, etc. that we would hold in-person. We are still in the process of figuring out the venue for these meetings. In addition, we plan on continuing to host our interactive presentations where students can learn about different STEM disciplines and will have the opportunity as well to interact with the presenters. Undergraduate Student panels will also be held where the RUSD students can ask the Science Ambassadors questions about college, forming, classes, research, etc. SISTERS will also be collaborating with the Chancellor's Research Fellows who will speak to the students about their research projects and how to get involved with research at the college level. In addition, we will be planning fun interactive projects for the student to complete, and discuss at the biweekly meetings such as plant projects, Rube Goldberg Projects, and more. We will be working with 7th and 8th-grade students again the following year, and will also open our program to all the middle schools in RUSD that have female students that would benefit from our program. Finally, we plan on hosting a Summer STEM program as well next year, so that female students in summer school can broaden their understanding of STEM through interactive presentations planned by SISTERS. Our mission is to empower female youth in the Inland Empire to pursue their passions in STEM through mentoring and supporting these students through our program and will continue this next year as well through all the projects/collaborations we have planned for the upcoming year.